



- DO NOT perform disk operations (format, partition and chkdsk) when multiple PCs have the NDAS mounted.
- NDAS device can be formatted, partitioned, chkdsk, aggregated or mirrored ONLY when one PC is connected.

6. Introduction to NDAS Device Management

6.1 NDAS Device Status Modes

- NDAS device provides users with six basic Modes.
- Below is a chart describing each of the NDAS device Modes and the icons that correspond with each Mode.

NDAS Device Color	Icon	NDAS Device Icon	Mode / Meaning
Green (Mounted RO)	■		Read-Only Mode - Users can only read from NDAS device.
Blue (Mounted RW)	■		Read / Write Mode - Users can read and write to NDAS device.
White (Connected)	□		Connected Mode - NDAS device is currently disabled on your computer and is ready to be mounted (enabled).
Black (Disconnected)	■		Disconnected Mode - NDAS device is registered but your system cannot find the NDAS device. - Power Cord, Ethernet Cord or USB Cord may be unplugged. - Make sure any Antivirus/Firewall software or Spyware is not interfering with the connection.
Red (Deactivated)	⊘		Deactivated Mode - NDAS device is registered but no longer communicates with your system. No attempts will be made to communicate with your NDAS device.
Yellow (Bound)			Bound Non-Primary Mode - Used for bound NDAS devices only. - All of the bound NDAS devices are displayed as yellow except the primary NDAS device.

6.2 NDAS Device Management

Click the NDAS Device Management  located on the system tray.

All registered NDAS device(s) will be displayed on the NDAS Device Management Menu.



- When you click on the  icon : Lists all NDAS devices that are registered.
- Register a New Device : Registers a NDAS device to your computer.
- Refresh Status : Updates status of your NDAS Device.
- About : Displays NDAS software version information.
- Options : Can customize NDAS Device Management features and error messages / dialogs.
- Exit : Exits NDAS Device Management.

NDAS Device Management can be restored by double clicking the icon  on the Desktop.

7. NDAS Device Functions

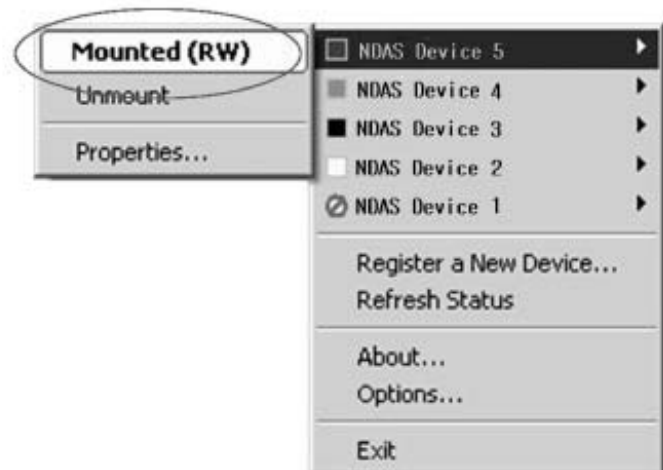
7.1 NDAS Device Management

Click NDAS Device Management and place the cursor on a NDAS device to view its functions. Below is a list of NDAS device Modes and related functions.

NOTE : The Yellow box is there to show the current mode status of your NDAS Device. It cannot be selected. For more information, please see the section 6.1 on page 28.

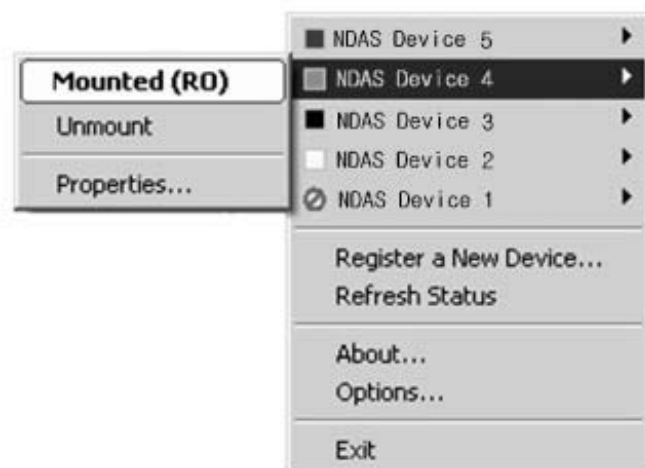
A. NDAS device mounted in Read/Write Mode

- Mounted (RW):
The current state of NDAS device.
- Unmount :
Enables users to change NDAS device mode to Connected Mode.
- Properties:
Displays properties of the NDAS device.



B. NDAS device mounted in Read-Only Mode

- Mounted (RO):
The current state of NDAS device.
- Unmount :
Enables users to change NDAS device mode to Connected Mode.
- Properties:
Displays properties of the NDAS device.



C. NDAS device in Disconnected Mode

- **Disconnected :**
The current state of NDAS device.
- **Unregister :**
Enables users to un-register NDAS device.
- **Properties :**
Displays properties of the NDAS device.



D. NDAS device in Connected Mode

- **Connected :** The current state of NDAS device.
- **Mount (Read-Only) :** NDAS device can be mounted into Read-Only Mode.
- **Mount (Read/Write) :** NDAS device can be mounted into Read/Write Mode.
- **Unregister :** Enables users to un-register NDAS device.
- **Properties :** Displays properties of the NDAS device.




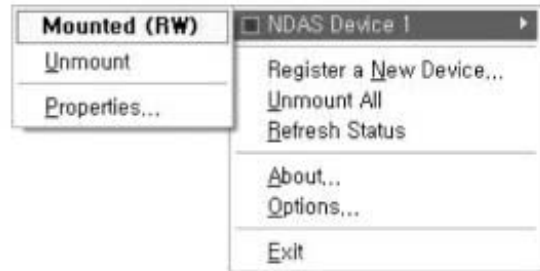
E. NDAS device in Deactivated Mode

- **Deactivated :**
The current state of NDAS device.
- **Activate :** Enables NDAS device to be activated into Connected Mode.
Once activated NDAS device will be indicated by white colored box.
- **Unregister :** Enables users to un-register NDAS device.
- **Properties :** Displays properties of the NDAS device.



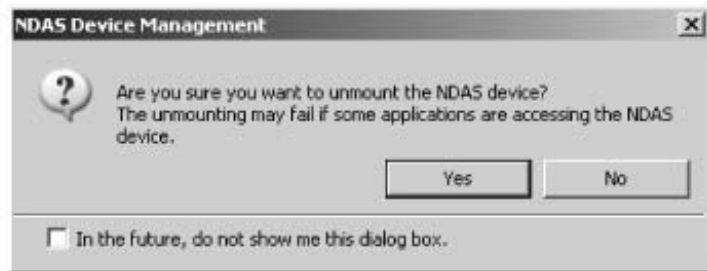
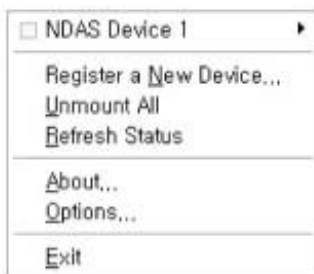
7.2 Changing from Read/Write Mode to Read-Only Mode

1. Click NDAS Device Management  and select the NDAS device you want to change from Read/Write to Read-Only.




2. Select Unmount

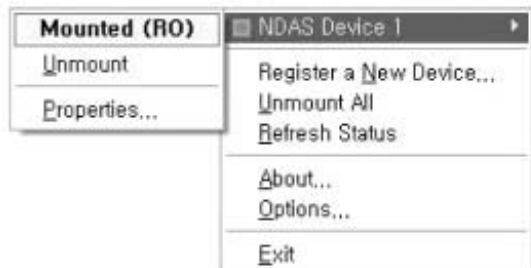
3. A warning message will appear. Click Yes.




The Blue Square will change to a White Square indicating Connected Mode.

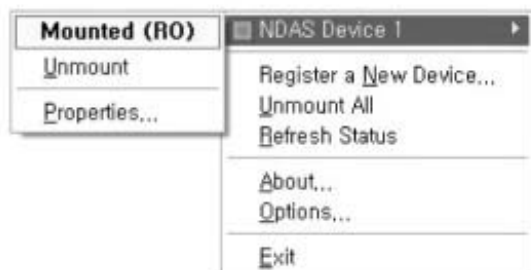
4. Click NDAS Device Management  and select the NDAS device you have just unmounted.
5. Select Mount (Read-Only).

The White Square will change to a Green Square indicating Read-Only Mode.



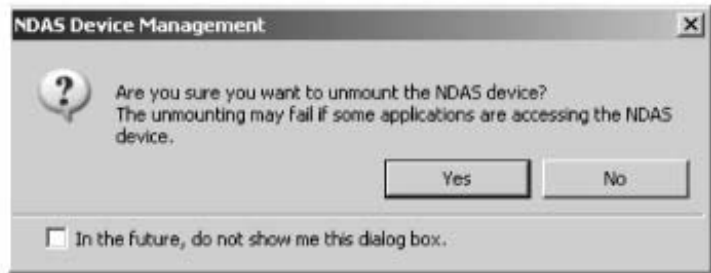
7.3 Changing from Read-Only Mode to Read/Write Mode

1. Click NDAS Device Management  and select the NDAS device you want to change from Read-Only to Read/Write




2. Select Unmount

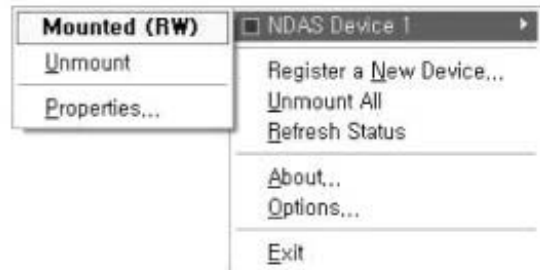
3. A warning message will appear.
Click Yes.



The Green Square will change to a White Square indicating Connected Mode.

4. Click NDAS Device Management  and select the NDAS device you have just unmounted.
5. Select Mount (Read/Write).

The White Square will change to a Blue Square indicating Read/Write Mode.



8. NDAS Bind Management

Using NDAS Bind Management users can perform Bind, Unbind and Mirror. There are 4 different buttons in the NDAS Bind Management window.

- Bind : Used for Aggregation, RAID 0, and RAID 1.
- Unbind : Used to Unbind your Bound NDAS devices.
- Tools : There are two different functions in Tools: Copy and Mirror and Recover Mirror.
 - Copy and Mirror is used to Mirror the first NDAS device to the second NDAS device.
 - Recover Mirror is used to recover the data on Mirrored NDAS Devices.
- Refresh : Used to refresh status of your NDAS devices.



8.1 Bind

There are three ways to bind: Aggregation, RAID0 and RAID1.

Aggregation

- Allows any number of NDAS device units between 2 and 8 to be recognized as a single large disk drive.
- Extremely useful when a larger storage device is needed.
- No fault tolerance. If one unit fails, all data is lost.

RAID0 – (Disk Striping without Parity)

- Allows 2, 4, or 8 NDAS device units to be recognized as a single large disk drive.
- Extremely useful when a larger storage device is needed.
- No fault tolerance. If one unit fails, all data is lost.
- Type of Aggregation method used for faster performance when writing to NDAS devices.

RAID1 – Mirroring

- Allows 2, 4, 6 or 8 NDAS device units to be mirrored at the same time.
- Fault tolerant. If one unit fails, data is retrieved from other units.
- Can also Mirror NDAS devices that have been Aggregated.

8.1.1 Requirements for Bind

- Each NDAS device must have a Write Key.
- Cannot Bind NDAS device that are already Bound.
- NDAS devices that are being Bound must be in Connected Mode on all PCs, including the PC which is performing the Bind.
- Bound NDAS devices must be formatted.
- Other users can Mount the Bound NDAS devices once Binding is completed.

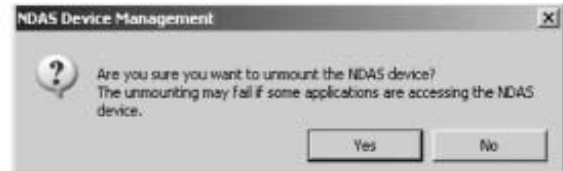
NOTE : Aggregation, RAID0 and RAID1 can only be performed in Windows XP and Windows 2000.

8.1.2 Connected Mode

Before NDAS devices can be Bound, they must be in Connected Mode.

1. Go to NDAS Device Management, choose a NDAS device you want to Bind.
 - If the NDAS device is in Mounted Mode, select Unmount.
 - If the NDAS device is in Connected Mode, leave it as it is.
 - If the NDAS device is in Disconnected Mode, try to reconnect it.
 - If the NDAS device is in Deactivated Mode, Activate the device.

2. A warning message may appear.



3. Click Yes.

4. Wait few seconds for changes to occur.

If the color of the NDAS device does not changed to White, click Refresh Status.

5. Repeat above steps for all NDAS device you want to Bind.

6. Make sure other PCs that are accessing the NDAS devices have also Unmounted the NDAS devices as Connected Mode.

8.1.3 Instructions for Bind

1. Two or more NDAS devices need to be in Connected Mode.

All of the NDAS devices must have the Write Key.

2. Go to Start > Programs > NDAS Software > NDAS Bind.


3. Click the Bind button.

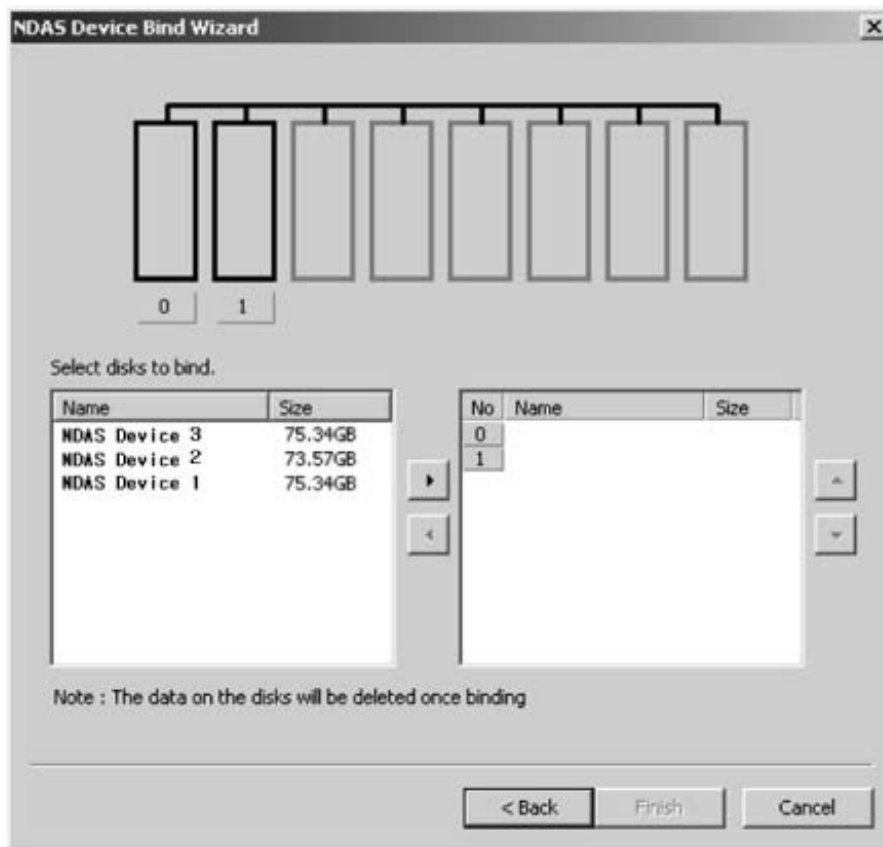


4. Select a binding type and number of disks to be Bind.

- Aggregation can bind any number of units between 2 and 8.
- RAID0 can bind 2, 4 or 8 units.
- RAID1 can bind 2, 4, 6 or 8 units.

NOTE : Currently RAID4 is not supported

5. Move a NDAS device from the left window to the right window by first selecting a NDAS device from the left window and then clicking the  button.



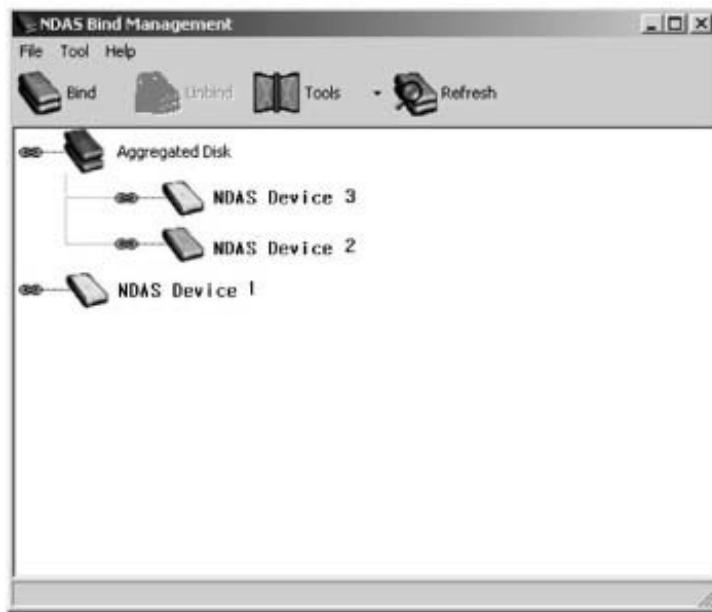
6. Repeat the above step for the rest for the NDAS device you want to Bind and click Finish.
7. Two warning messages will appear.
- Once NDAS devices are bound, all of the data will be lost. Click Yes to continue.



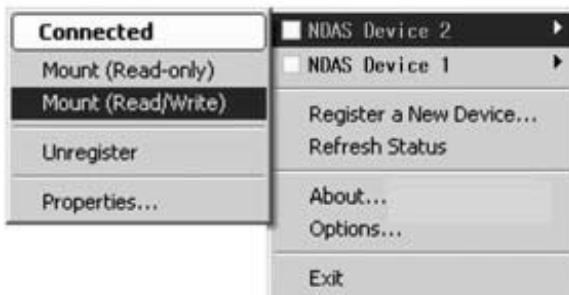
- The new bound NDAS devices must be mounted and formatted before it can be used. Click OK.



– Your NDAS Devices should now be bound.



8. Go to the NDAS Device Management and Mount the Bound NDAS devices.
 - To do so, select any one of the Bound NDAS device and select Mount (Read-Only) or Mount (Read/Write).



9. Found New Hardware Wizard may appear. Click Next and proceed in finishing the wizard.
10. Before Bound NDAS device can be used, it must be formatted.
 - Please go to Chapter 10.2 Formatting NDAS Device.

8.2 Unbind

- You can unbind one or all of the NDAS Devices from a bound group.
- Section 8.2.1 shows you how to unbind all of the NDAS Devices and 8.2.2 shows you have to unbind only one NDAS Device.

8.2.1 Unbind All

1. Go to NDAS Device Management and select a Bound NDAS device you want to Unbind.
2. Unmount the NDAS Device by clicking on Unmount.

NOTE : If the bound NDAS device is in use, a warning message will appear.
Make sure that no programs are using the NDAS Device and try again.

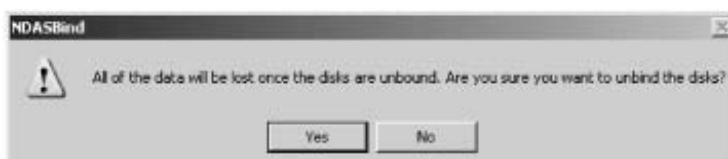
3. After you have unmounted the NDAS Devices, go to NDAS Bind Management.
4. From the NDAS Bind Management, select the Bound NDAS device you have just unmounted. Click the Unbind button.



5. Unbind window will appear. Make sure these NDAS devices are ones that needs to be unbound and click Yes.



6. Two warning messages will appear.
 - Once NDAS devices are bound, all of the data will be lost. Click Yes to continue.



- The new bound NDAS devices must be mounted and formatted before it can be used. Click OK.



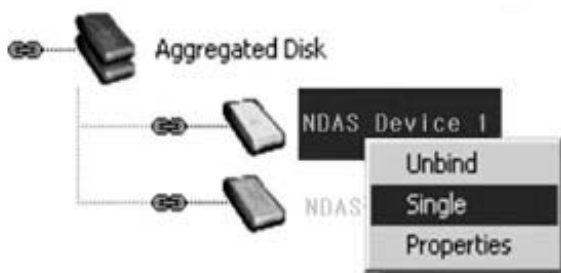
7. Now you can go back into the NDAS Device Management and Mount each of unbound NDAS device.
8. Before using the NDAS devices, please format each of the unbound device.
9. Please refer to Chapter 10.2 Formatting NDAS Device.

8.2.2 Unbind a Single NDAS Device

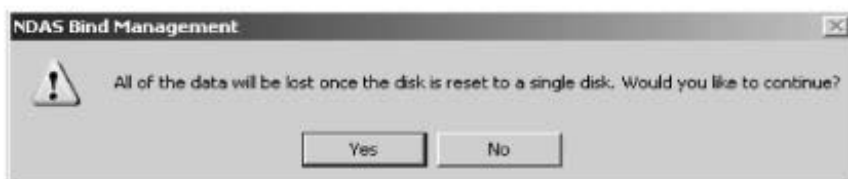
1. Go to NDAS Device Management and select a Bound NDAS device you want to Unbind.
2. Unmount the NDAS Device by clicking on Unmount.

NOTE : If the bound NDAS device is in use, a warning message will appear.
Make sure that no programs are using the NDAS Device and try again.

3. After you have unmounted the NDAS Devices, from NDAS Bind Management select one NDAS device you want to unbind.
4. Right click on the NDAS device and select Single.



5. All data will be lost if you want to convert it to a Single disk. Click Yes if you want to continue.



NOTE : Once the Binding has been broken, you cannot re-add any NDAS Devices to the broken Bound device. You will have to recreate the Bind and format it again.

6. For formation of the NDAS device, please refer to Chapter 10.2 Formatting NDAS Device.
7. When you are finished formatting, your NDAS Device should show up in My Computer as a local drive.

8.3 Tools

Tools provides two type of functions :
Copy and Mirror and Recover Mirror.



8.3.1 Copy and Mirror

- The Copy and Mirror Function is used when you have a NDAS device with data on it and then want to copy it to another NDAS device that does not have any data. Then have it mirror each other.
- The second NDAS device must be of equal or greater capacity to use this function.

8.3.2 Using Copy and Mirror

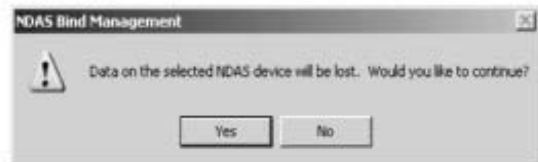
1. Go to Start > Programs > NDAS Software > NDAS Bind
2. Select a single NDAS device.

NOTE : A NDAS device must be in a
Connected Mode and have the
Write Key.

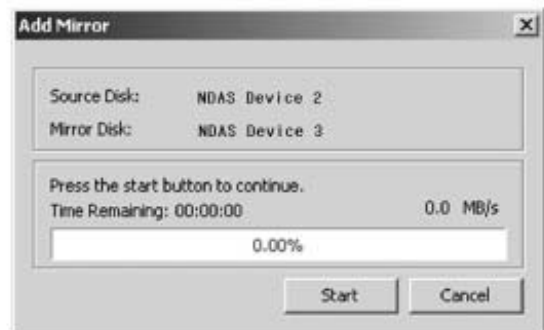
3. Click Tool button and select Copy and Mirror.
4. From the list, select a NDAS device you want to mirror the first NDAS device to.
Click OK.



- A warning message will appear.
Click Yes.



- Add Mirror window will appear.
Click Start to start synchronizing.

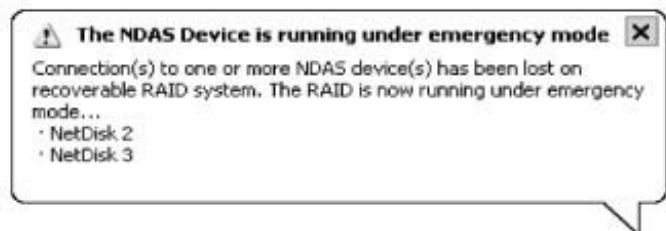


8.3.3 Recover Mirror

Recover Mirror is used when there is an error in Mirrored NDAS Devices.

8.3.4 Using Recover Mirror

- An Emergency Mode message will appear when an error occurs in Mirrored NDAS Devices.



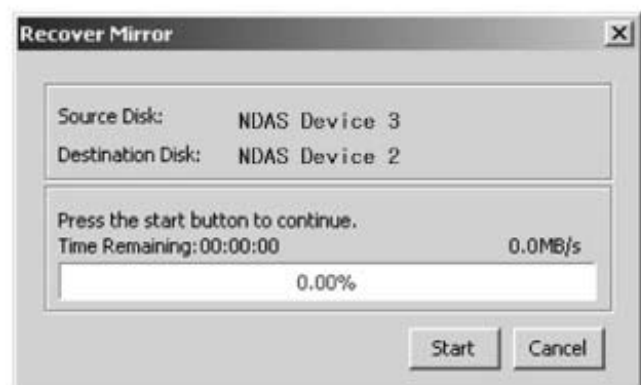
- Go to NDAS Device Management and unmount the Mirrored NDAS Devices.

NOTE : NDAS device must be in a Connected Mode and have the Write Key.

- Go to Start > Programs > NDAS Software > NDAS Bind
- Select on the Mirrored NDAS devices.
- Click Tool button and select Recover Mirror.



- Recover Mirror will appear.
Click Start button.



7. If Mirrored NDAS Devices are not in the Connected Mode, below warning message will appear. Please unmount the Mirrored NDAS Device and try again.



9. Other NDAS Bind Management Functions

- Recognizes Mirrored NDAS devices that have been Mirrored using earlier driver.

9.1 Using Mirrored NDAS Devices

Driver 3.10 does not support the Mirror feature that have been offered by our earlier driver versions. However, the driver does recognize the Mirrored NDAS device and will display them on the NDAS Bind Management. Users can continue to use Mirrored NDAS devices as before. But users cannot modify the Mirrored NDAS devices. If so, the Mirrored devices will break.

9.1.1 Upgrading the driver without breaking the Mirrored NDAS device

1. Disable all NDAS devices. (both single and bind devices)
2. Uninstall the driver.
3. Install the 3.10 driver.
4. Need to register NDAS devices again.

NOTE : When registering the bound NDAS devices, the NDAS Device Registration Wizard will only allow the bound NDAS devices to be mounted when both of the bound NDAS devices are registered. During the registration of the first device, the Wizard will only allow the device to be registered as Connected Mode.

5. Go to NDAS Device Management and Mount the Mirrored NDAS device.

6. Now you can use the Mirrored NDAS devices.

NOTE : Cannot modify the Mirrored NDAS devices. If so, NDAS devices must be re-mirrored using RAID1 and all the data will be lost.

9.1.2 Using Bound NDAS device among different driver versions

If a user upgrades his/her driver to 3.10, we recommend everyone else sharing the NDAS devices to upgrade their driver to 3.10 as well. Once the user with 3.10 migrates the Mirrored NDAS device's binding information, other users sharing the Mirrored NDAS device will no longer have access to the Mirrored NDAS devices.

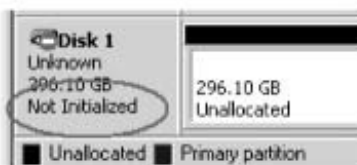
Here are two options :

1. We recommend all users sharing the Mirrored NDAS devices upgrade their driver to 3.1X or higher.
2. Unbind the Mirrored NDAS device and use them as two single devices that can be shared by both users using 3.10 and earlier drivers.

10. Formatting NDAS Device

10.1 Initialize NDAS Device

1. Right click My Computer and select Manage.
2. Computer Management window will appear.
Click Disk Management under Storage.
3. Computer Management window will list all the disks in the computer.
4. Find the NDAS device you want to initialize.
– The NDAS device is usually indicated by Not Initialized.



- If the NDAS device is described as Basic or Healthy, skip to Chapter 10.2 Partition NDAS Device. Otherwise, go to next step.

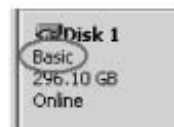
5. Initialize NDAS Device

- Right click on the Disk # that pertains to your NDAS device and select Initialize Disk.
- Initialize Disk window will appear.
Select the NDAS device and click OK.



6. NDAS device will be automatically initialized.

- Unknown **Disk 1** becomes Basic. **Disk 1**



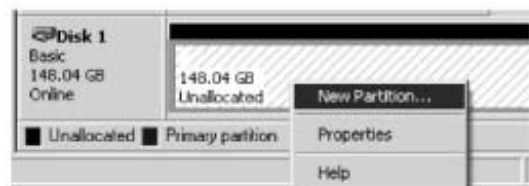
NOTE : It is VERY important that your NDAS Device is listed as a Basic Disk and not a Dynamic one.

7. Initialization is completed.

- Before NDAS device can be used, it must be partitioned. See Chapter 10.2

10.2 Partition NDAS Device

1. From the Computer Management window, find the NDAS device you want to format.
2. Right click and select New Partition.



3. New Partition Wizard : Click next.

4. Select Partition Type :

- Select Primary partition.
- Click Next.



5. Specify Partition Size :

Click Next.

NOTE : The partition size is automatically set. Do not change the size.



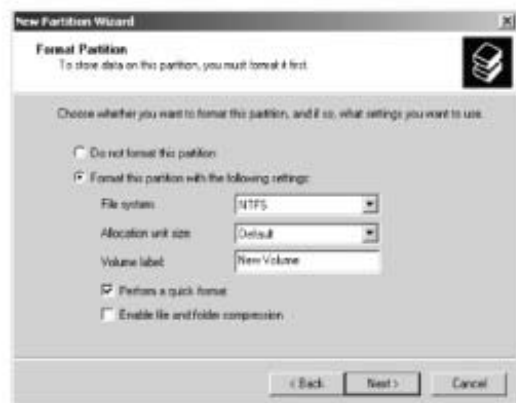
6. Assign Drive Letter or Path :

- Select Assign the following driver letter.
- Choose a letter for the drive from list.
- Click Next.



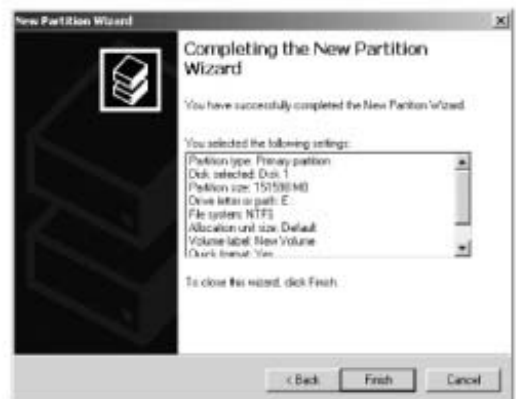
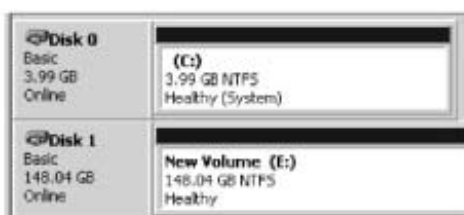
7. Format Partition :

- Select Format this partition with the following Settings .
 - File System : NTFS
 - Allocation unit size : Default
 - Volume Name : Enter a name for the disk.
- Select Perform a quick format (Recommended).
- Click next.



8. Partitioning is finished. Click Finish.

- You can see the partitioned disk.



10.3 Format NDAS Device Through My Computer

1. Double click on My Computer. 

2. My Computer window will appear.

Right Click on your NDAS Device choose Format

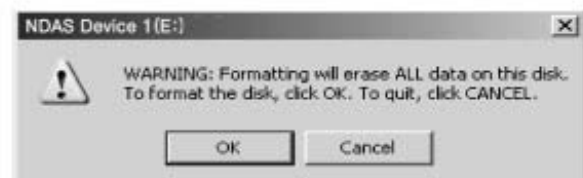


3. The Format window will appear with a few options.

Check the box that says Quick Format
(Recommended)



4. A Warning will appear asking
if you are sure you want to format
the drive. Click on OK.



5. Click on OK once the format has completed.



11. Uninstall

Before you can uninstall a NDAS device, you must close all applications using the NDAS device. NDAS Disk Management, NDAS Bind Management, Windows Explorer and Internet Explorer must also be closed.

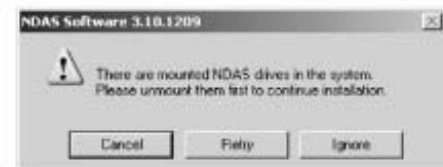
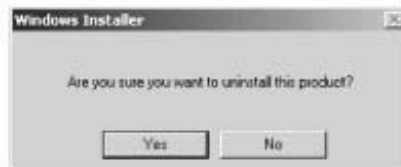
1. Close NDAS Disk Management by selecting Exit.



2. Uninstall NDAS device.

- Go to Start > Programs > NDAS Software > Uninstall NDAS Software
- Windows Installer will appear. Click Yes if you want to continue.

Otherwise click No.



NOTE : A warning window may appear if any of the NDAS device is still in mounted state. Click Cancel and unmount the NDAS devices.

3. Restart the PC once uninstall is finished.

*** 12. IntelliStor ***

■ IntelliStor LT Quick Start Guide

1. IntelliStor LT Install

1.1 Simply place the IntelliStor(eng)CD in your CD-ROM drive and you will start setup.exe.

Enter serial key on the wizard.

(Serial No : ENBJ-W9OD-MX9O-5B59-VNGG)

All installation processes are completed, Restart system.

Connect the product to USB port on the computer.

Disconnect the product from USB port.

Connect the product to USB port on the computer again.
Run IntelliStor on the intellistor icon at Windows Desktop.

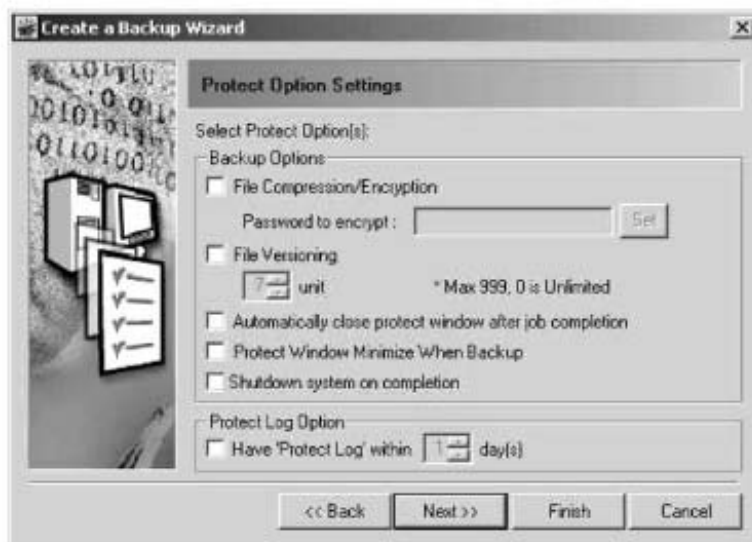
2. Backup Destination Setting

To assign the location of backup data, click 'next' after assigning backup location on the backup location setting wizard. Not only backup device on network, but also local HDD or DVD-ROM selections are available. If the backup device is a portable disk, please check "Removable Drive" option.



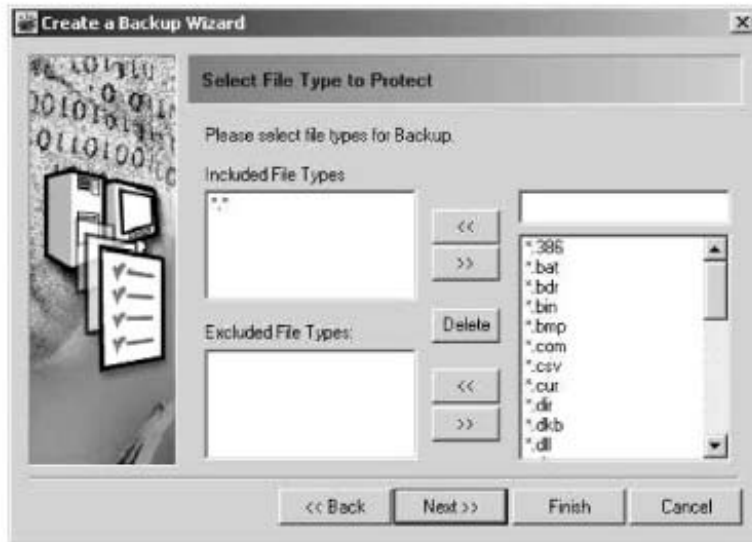
3. Backup Option Setting

Check the backup option to be used backup. User can choose options File Compression/Encryption, File Versioning, Automatically close protect window after job completion, Protect Window Minimize When Backup, Shutdown system on completion and so on.



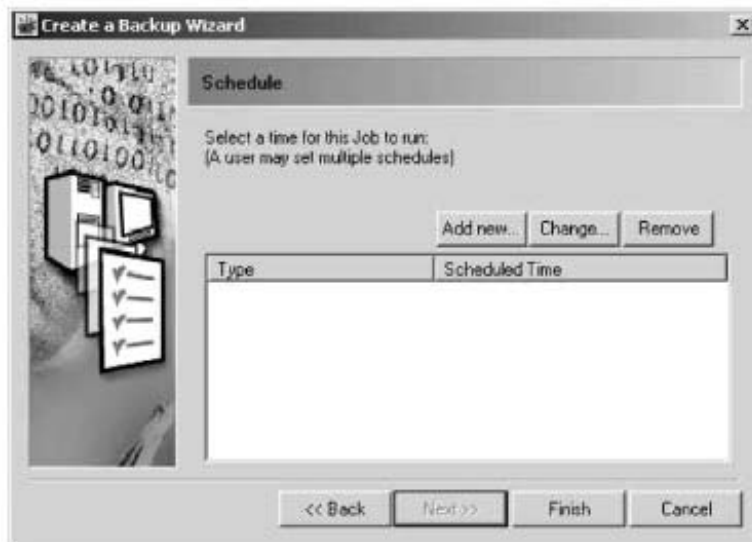
4. Backup file filter Setting

Type of backup file can be chosen at the backup wizard. If you click 'Next' without any choice, all types will be saved as backup file.



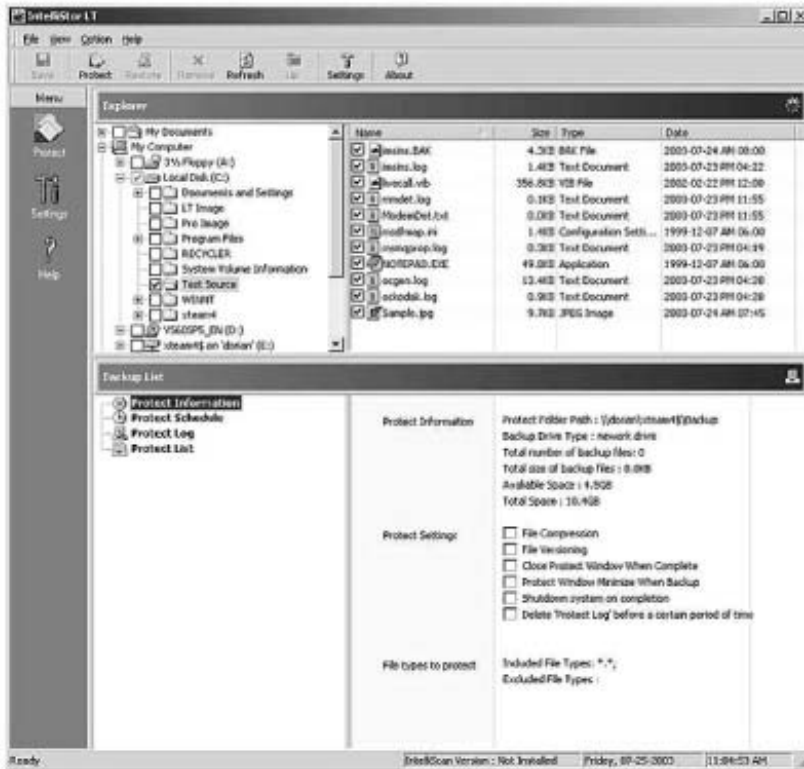
5. Scheduling Setting

Schedule can be set in this step. Backup performs automatically according to the set time. For setting schedule, click 'add' and setting the schedule. Click 'Finish' and the schedule window will disappear.



6. Backup Operation

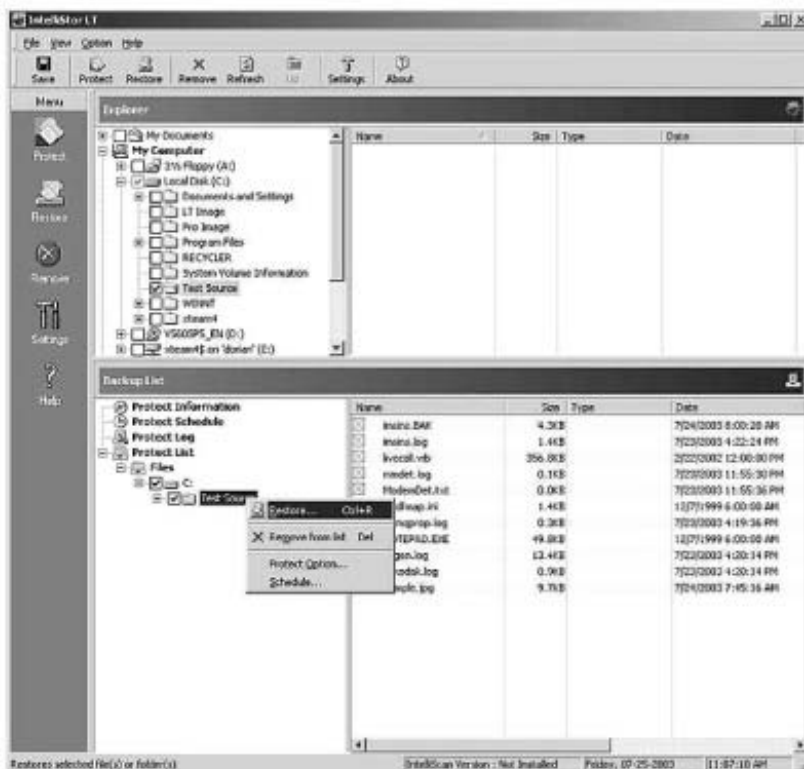
Select backup source or folder from the "explorer" then start backup by selecting "save" and "backup" at Toolbar. To start backup, click the 'Protect' at icon bar.



7. Restore Operation

Open 'backup list' and select data by clicking right button of mouse.

You can select 'Restore' at the menu. Restore destination (location) can be set in the Restore wizard.



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*** 13. FAQ ***

For the most recent list of FAQs, please visit <http://www.sarotech.com>

General

1. What can be used for?

NDS-354 can be used with a variety of applications. It is ideal for all users that cannot afford NAS systems, such as small to medium businesses, SOHO (Small Office Home Office), workgroups, departments, schools and public institutions. NDAS technology's convenience and low cost provides the best storage solution for home / office networking.

- Use as storage for Personal Computer and Home Networking
(storing and sharing files, backup/archiving, etc.)
- Expanding storage requirements.
- Business primary or secondary network storage.
- Public institution's storage for data archives, disclosed data, backups, and data conservation.

- Multimedia storage device (MP3s, Digital Photos, Digital Video).
- Multi–platform networking (Simultaneous use from Macintosh and Windows)
- Non–PC/ Non–Computing applications (security, CCTV, technograph recording, MRI, entertainment).

2. How is NDS–354 different from NAS or SAN?

NDS–354 is a better alternative to NAS or SAN. NDS–354 is much more cost–effective, efficient and easy to use. It is for users looking for lower costs and storage associated with backup/archiving.

Although both NDS–354 and NAS are storage devices that are implemented over a network, NDS–354 takes up less space than NAS or SAN products.

NDS–354 utilizes NDAS technology – allowing it to connect the hard disk directly to a network without a server. In NAS, the hard disk must be connected to a storage server, which must also be connected to the network.

Windows 2000 / XP

1. I am having trouble using Multi–write over wireless connection.

What do you recommend?

Try a wired connection for our 3.X drivers and compare how it works.

If you are using wireless with other computers, we recommend enabling the hard–wired computer first, then the wireless computer.

When using wireless, we also recommend 802.11g. When using 802.11b, we highly recommend hardwiring your computer when doing large file transfers because of the low bandwidth associated with 802.11b.

2. How should I format NDS–354?

We recommend formatting NDS–354 via NDAS (Ethernet) mode. If using NDS–354 as a USB device only, then it is OK to format via USB. It is also recommended that you format NDS–354 to NTFS if using Windows 2000/XP.

3. How do I disconnect NDS–354?

We always recommend using the Disable option from your NDAS Administrator Tool if connected via NDAS (Ethernet). You can use the "Unplug or Eject Hardware" icon in your System Tray to stop the NDAS Device before disconnecting (this applies to either USB or NDAS mode). Close all windows that may be accessing the NDAS Device.

4. When I try to write to NDS-354 I get a "write protected" error and cannot write to the disk.

The permissions scheme may need to be reset. Try disabling the NDS-354 on all machines first, then re-enable them one by one. If that doesn't help, try rebooting the machines and power cycling NDAS Device.

5. When I try to write to NDS-354, I get the following error message: "NDAS Device is being used by non-compatible software on another PC. You can use read-access only for now." What does this mean?

This means that there is another computer on the network that has a different version of the NDAS software installed. All machines must have the same exact version of our software. Please make sure that all computers have the same exact version of NDAS software installed. For instance, 3.02 is different from 3.03

6. Can I set the "My Documents" folder to point to my NDS-354 instead of a place on my local hard drive?

We do not recommend doing this, as your computer will be dependent on this location during software installation and uninstallation. You may receive Windows Error Messages looking for a non-existing location.

7. My computer is moving very slowly when my NDS-354 is enabled, and the ACT light on my NDS-354 is solid yellow. What is going on?

This is a result of a bad connection between the computer and the NDS-354. Please make sure that you are using only network switches and routers, and that you are not using any network hubs. Also, if you have any software firewalls installed on your computer (i.e. Norton Internet Security, McAfee Personal Firewall, etc.), make sure to add Admin.exe and LDServ.exe into their list of programs to Allow with full access. You can also try disabling your Antivirus software to see if that makes a difference. Please also try power cycling your NDS-354 and switch as well.

8. Sometimes when I transfer files to my NDS-354, why is the speed so slow?

Try updating your Network Card's drivers to the latest from the manufacturer. If you network card has the option of changing the transmit and receive buffers to both 128 (in the card's properties in device manager), please try doing that. If you have an nForce chipset, try updating your Nvidia nForce drivers to the latest Unified Drivers from Nvidia's website. Please also make sure that you are using 100mb switch as well.

9. I've installed my NDS-354 and it shows up as a Black Dot.

NOTE : If you are using NDS-354 via USB, then no software installation is required, therefore, please ignore the Black Dot.

Please check to make sure of the following :

- A. You are using the latest version of our software which can be found at www.sarotech.com
- B. Power cable is plugged in tightly, and NDS-354 hard drive is spinning.
- C. There is a link light on the port where it is connected to (switch), and the Power switches (if any) is in the ON position.
- D. Please make sure that any firewall/antivirus software is disabled before installing. The latest versions of antivirus software have a new feature called script blocking. Please also ensure that this feature is disabled before continuing
- E. You might also need to enable our protocol and programs to run in your Antivirus/Firewall program as well.
- F. Even after you have done these things, it is still possible that the firewall/antivirus software is blocking access. For troubleshooting purposes, if it still does not work, please try uninstalling the firewall/antivirus software, reboot, then reinstall our software to see if it works. If it works, then you can go ahead and re-install the antivirus/firewall software.
- G. If using Wireless, then please make sure that you are connected to the wireless router and that your signal is good. Try going to your wireless router's website and check for the latest firmware and also check for the latest drivers for your wireless card as well.
- H. Try plugging in via wired connection and see if it works that way.
- I. Powercycle your switch/router.
- J. If you are using VPN software, please try unchecking the box for Deterministic Network Enhancer or any other VPN protocol in your NIC Properties.
- K. Check to see if you have any Spyware installed.
- L. For further help, please contact support@sarotech.com

10. When adding NDS-354 to my computer, why does the "ADD" button stay gray?

You may not have entered all the alpha-numeric values correctly.

There are no letter "O"s; please verify that you have used the number "0"(zero) for anything resembling an "O." Also please check your other letters as well ; two V's may look like a W. Start by entering only the NDS-354 ID. The ADD button should

not be grayed out if the correct ID is entered. Once it is not grayed out, proceed to add the Write Key as well. Please also make sure that there are 20 characters for the NDS-354 ID, not including the Write Key.

11. I installed the NDS-354 key but cannot see NDS-354 in "My Computer." What should I do?

Click on the NDAS Admin Tool in your System tray and make sure NDS-354 is enabled. There should be a dot next to your NDS-354, colored either Blue (Read/Write) or Green (Read Only). If it is a black colored dot, then please go to the FAQ: "I've installed my NDS-354 and it shows up as a Black Dot."

If NDAS Device is enabled, open "Computer Management" by right-clicking on "My Computer." Go to "Manage," then click on "Disk Management." Check if your NDS-354 is recognized.

It should show up as Disk 1 or Disk 2 or a different number depending on the number of drives that you have on your computer. Right-click on the appropriate "Disk #" and click "Initialize." if that option exists.

Also make sure that the NDS-354 is partitioned and formatted. If you see something that says "Unallocated," then right-click on the "Unallocated," create a partition, and then format the drive to your file system preference.

To use NDS-354 with other Operating Systems such as Mac OS X, you will need to format your NDS-354 to FAT32 for it to be recognized.

12. Why am I getting a "Data has been corrupted" message when I try to open or copy a file?

- Open up Command Prompt and run "chkdsk" for the NDS-354 drive.
- Go to Start - Run - type in "cmd" without the quotation marks.
- Then type in "chkdsk NDS-354 DriveLetter: /F" (For example, if your NDS-354 shows up as drive letter E: in My Computer, you would type in the following :
chkdsk E: /F)

13. I just installed NDS-354; why is the NDS-354 showing up as a red color?

Try unplugging your NDS-354's power cord, wait about 10 seconds, and plug it back in. If this does not work, restart your computer. Please disable your firewall/antivirus software (you may need to configure the software to allow your NDS-354 to run). If this does not work, plug NDS-354 via USB to see if it is recognized. If so, recover the data and reformat the drive. While in USB, delete the partition

and bring the NDS-354 back to the Ethernet and format the NDS-354.

* Formatting will erase any data on the drive.

14. I keep getting "Internal Error ; Update Failed." What does this mean?

Try updating to our latest drivers to see if that fixes the problem.

Before installing our NDS-354 software, please disable any Firewall/Antivirus software and also make sure that Script Blocking is turned off for antivirus software. If problems still persist, please try uninstalling the Firewall/Antivirus software and reinstall NDS-354 software. Also try updating your NIC drivers to the latest available from the manufacturer.

15. I am getting the message "Connection closed abnormally. Try to reconnect." What does this mean?

Check that you are using the latest version of our software.

If NDS-354 keeps losing its connection to your computer, check your USB or Ethernet cable connection.

We recommend using NTFS for multi-write 3.X software for Windows XP/2000. To verify this, right-click on your NDS-354 drive letter from My Computer and click on Properties. Under File System it will indicate the type of file system your NDS-354 is formatted to. To format NDS-354 to NTFS, right-click on the NDS-354 drive letter from My Computer and click on Format. A drop down menu will allow you to select NTFS. Check the box next to the word Quick Format.

You may want to format through Disk Management : Right click on My Computer, then click on Manage. Computer Management will open, and click on Disk Management. Check if your NDS-354 is recognized. It should show up as Disk 1 or Disk 2 or a different number depending on the number of drives you have on your computer. Right-click on the appropriate "Disk #" and right-click on the white area for options to format and/or delete partition.

* Formatting will erase any data on the drive. Please back up before continuing.

Make sure that NDS-354 is plugged into a 100mb/full duplex capable switch and that you are using a 10/100mb Network Card. NDS-354 is not supported on hubs. If your switch is uplinked to another one, place NDS-354 and your computer on the same switch and retry.

Try setting your NIC's speed/duplex settings to 100MB/full duplex : Right-click on My Network Places, click on Properties, right-click on Local Area Connection and click on Properties. Then click on the Configure button next to your NIC and click on the Advanced tab. Here, you should find a category related to "Speed & Duplex", "Media Settings", etc . where, once highlighted, you can click on a drop down menu and select 100mb/full duplex.

You can also go to your NIC (Ethernet card) manufacturer and download the latest drivers. If using a DSL router, update the firmware.

Or, plug NDS-354 and your PC into a different port on the switch and check for different results.

If you are using any Antivirus/Firewall software, please try disabling it and see if that solves the issue. The latest versions of antivirus software have a new feature called Script Blocking. Try disabling that as well because disabling Antivirus may not necessarily disable that feature.

16. Why can't my computer go into hibernation or standby?

You must have customer select the Allow suspend/hibernation box from the Options menu in NDAS Device Management.

17. I have clicked on the NDAS Admin Tool on my desktop and nothing happens.

The icon on the desktop is only used to launch our icon into the system tray, if for some reason it is not already there. The icon in the system tray is used for Enabling/Disabling, Adding/Removing, and switching modes for Read/Write on NDS-354.

18. When I try to copy something to my NDS-354, why does the following show up : "Cannot copy ... Administrator: The disk is write-protected. Remove the write-protection or use another disk."?

You do not have Read/Write access. Click on the NDAS Admin Icon in your bottom-right system tray. Go to your NDS-354 and then click on "Enable Read/Write."

19. Why can't I format my whole NDS-354 to FAT32?

Windows 2000/XP comes with a limitation of only 32GB partitions that it can create. This is a Windows limitation and the only resolution is to use a 3rd party partitioning

software or use a Windows 98SE/ME computer to format the entire drive to FAT32. With our Multi-Write drivers, NTFS is recommended anyways for stability and performance purposes.

USB

1. I have plugged in NDS-354 to my USB port and cannot see NDS-354 in My Computer.

Make sure both Power switch on the back of NDS-354 (if any) is in the "ON" position (Power off NDS-354 completely before doing so). Or, plug NDS-354 into a different USB port on your PC. Or try using a different USB cable.

With Windows ME/2000/XP and MAC, NDS-354 uses the Operating System's built-in USB drivers, therefore, no software is necessary.

If you are using Windows 98SE, please check our website for the latest USB drivers. www.sarotech.com.

If using Windows 98SE/ME, and MAC, make sure that NDS-354 is formatted to the supported files system. Windows Me requires FAT32. Mac has its own file system, but also supports FAT32. It is up to you to choose the appropriate one.

2. My NDS-354 shows up as a Black dot when used with USB.

When used with USB mode, the software is not needed, therefore you will see a black dot (disconnected) in the system tray as that is an indicator for NDAS (Ethernet) mode.

▀▀▀ 14. Additional Information and Assistance ▀▀▀

For additional information, frequently asked questions or troubleshooting help, please refer to the User Manual.

Assistance is also available by contacting Sarotech, Inc. Whenever you contact Sarotech, Inc. for technical support, please have the following information available :

- Product Name
- Model
- Serial Number
- Software Version

How to Contact Sarotech, Inc. :

Email support : support@sarotech.com

Technical Support on the Internet :

For the latest information on NDS-354, visit our website at www.sarotech.com.

15. Specification

Model	NDS-354
Interface	USB 2.0 Fast Ethernet LAN(100Base-T/802.3u)
Data Transfer	USB 480Mbps(Max) Ethernet 100Mbps(Max)
Dimension	221 X 148 X 40 mm (D x W x H)
Weight	0.715Kg (Without HDD)
Power Supply	Input 95- 240Va.c. 50-60Hz
Supported OS	USB 2.0 : Windows 98/ME/2000/XP/Server 2003, Mac OS 9.0 or higher Network : Windows 2000/XP Application : Desktop PC or Notebook PC supporting LAN or USB port

* Caution : The specification can be changed depends on fixed HDD inside NDS-354.



NDS-354 Network Storage