



NAStorage Administrator Guide

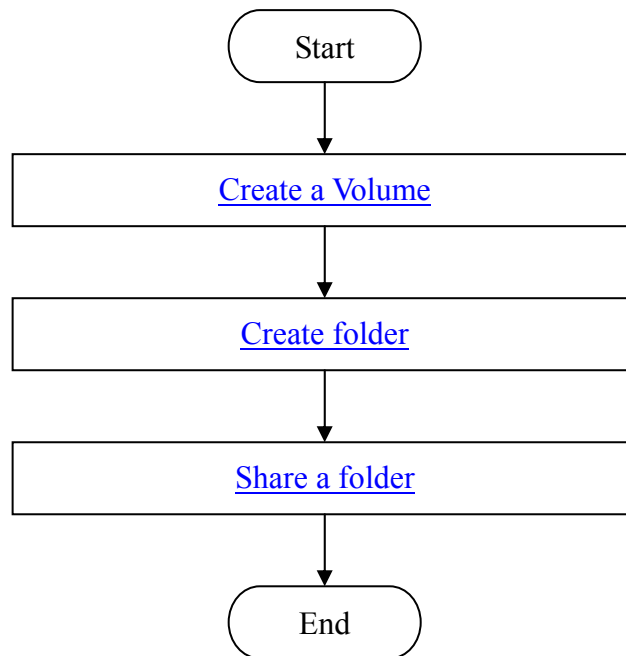
First installation

**Version 1.00
10/01/2002**

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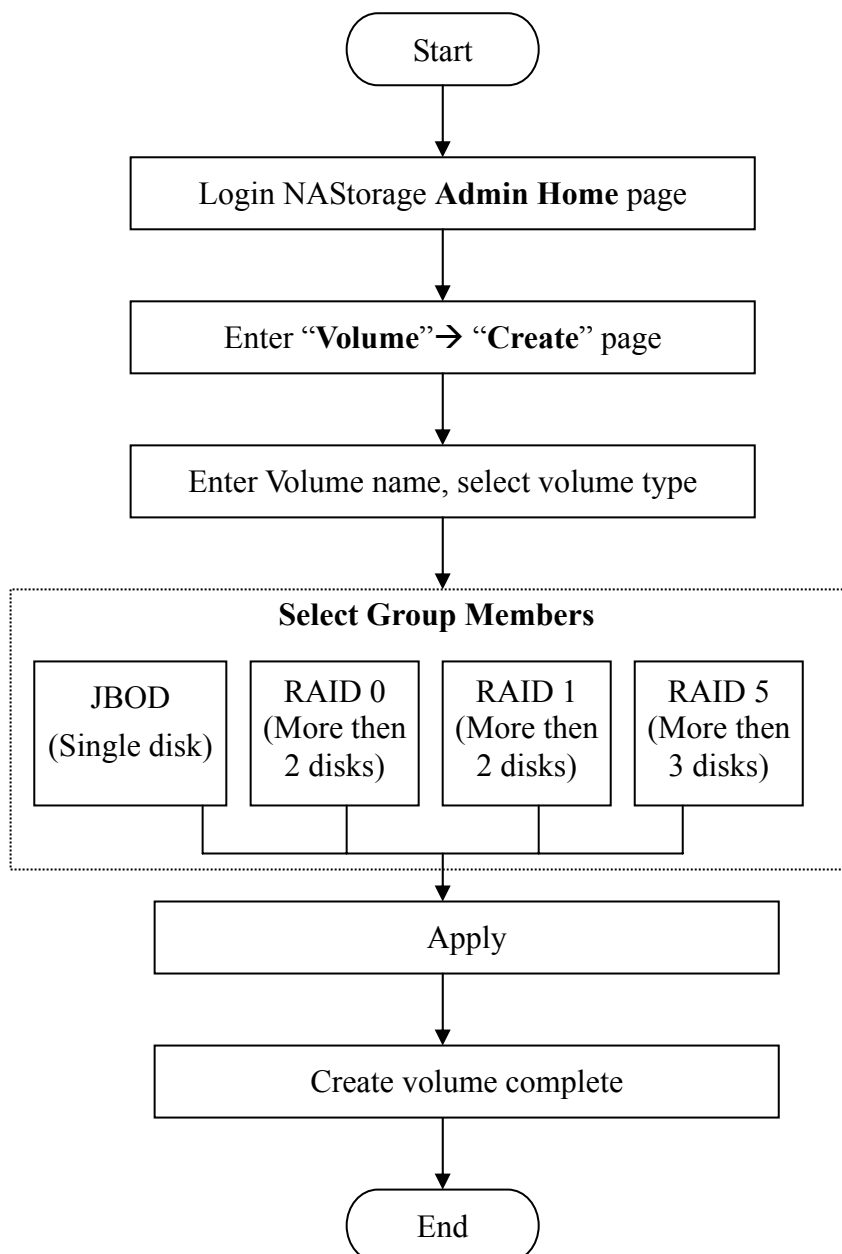
First installation



How to create a volume in NAS?

A volume must be created first before users can access the storage. A volume is a logical storage unit, which holds a separate file-system. A volume can be a single hard disk or a RAID group consisting of two or more hard disks. The volume type includes JBOD (single hard disk), RAID 0, RAID 1, and RAID 5.

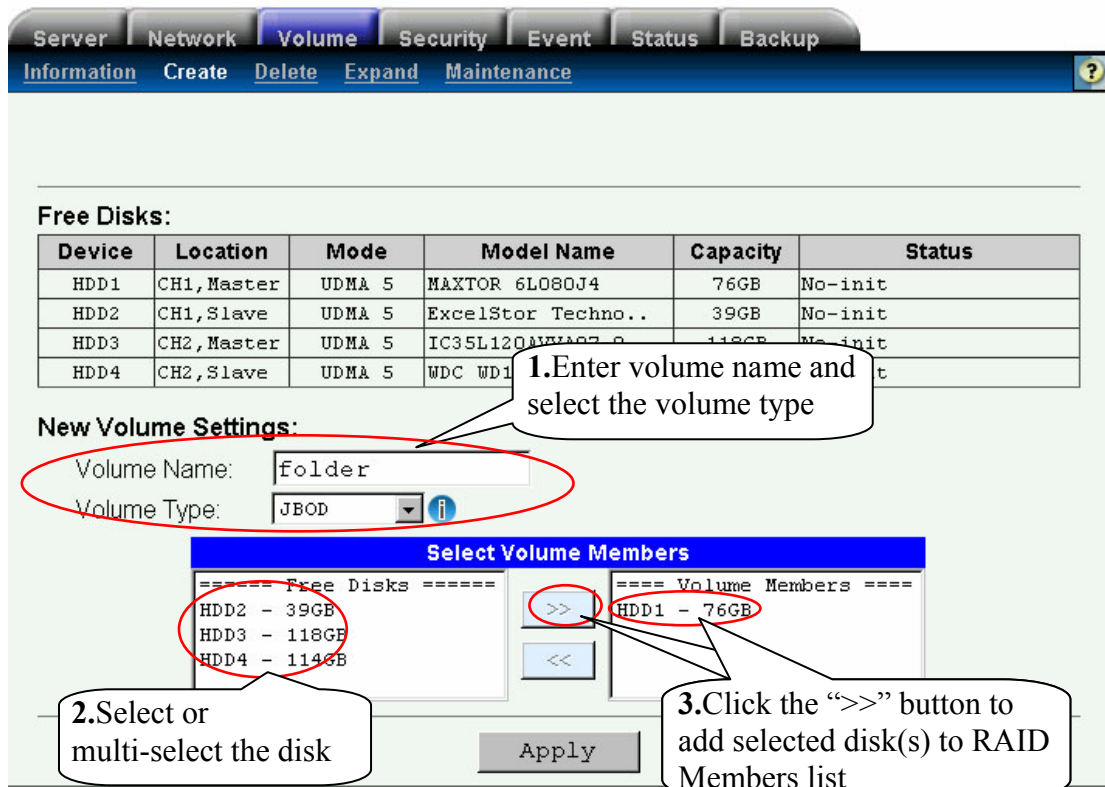
To create a volume, first specify the volume name in the Volume Name field. Next, specify the volume type. Then choose the hard disks to be included in the volume. Last, click Apply to submit changes. The progress of volume creation is shown on the Volume Information page.



Create a JBOD Volume

JBOD: Just a Bunch Of Disks. JBOD means use a single disk to create a Volume.

1. Enter NAS homepage **Volume--> Create** page.
2. Input the Volume Name and select the Volume type to JBOD.
3. Select or multi-select specific disk from **Free Disks** list to **RAID Members** list.
4. Click the **Apply** button



Free Disks:

Device	Location	Mode	Model Name	Capacity	Status
HDD1	CH1, Master	UDMA 5	MAXTOR 6L080J4	76GB	No-init
HDD2	CH1, Slave	UDMA 5	ExcelStor Techno..	39GB	No-init
HDD3	CH2, Master	UDMA 5	IC35L120AVVA07-0	118GB	No-init
HDD4	CH2, Slave	UDMA 5	WDC WD1	114GB	No-init

New Volume Settings:

Volume Name:

Volume Type:

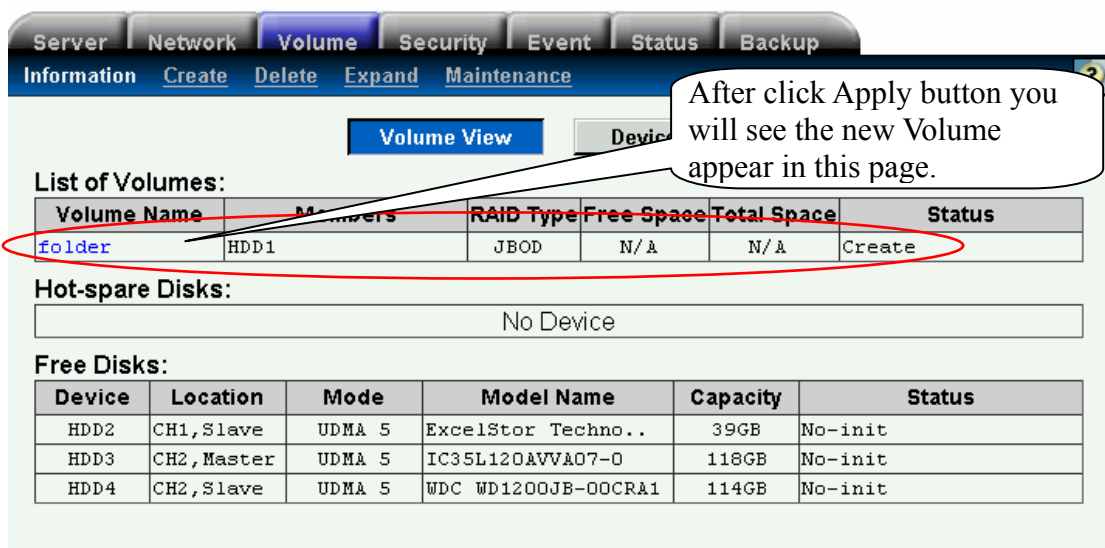
Select Volume Members

Free Disks	Volume Members
HDD2 - 39GB	HDD1 - 76GB
HDD3 - 118GB	
HDD4 - 114GB	

2. Select or multi-select the disk

3. Click the ">>" button to add selected disk(s) to RAID Members list

Apply



Volume View

List of Volumes:

Volume Name	Members	RAID Type	Free Space	Total Space	Status
folder	HDD1	JBOD	N/A	N/A	Create

Hot-spare Disks:

No Device

Free Disks:

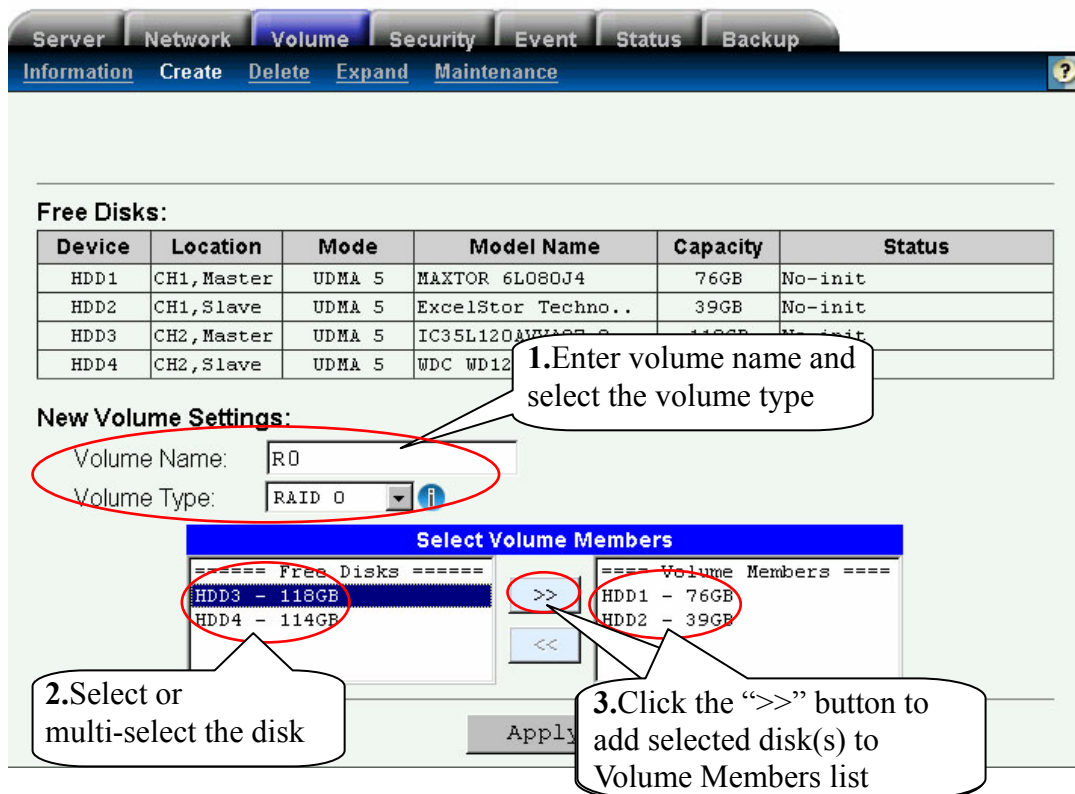
Device	Location	Mode	Model Name	Capacity	Status
HDD2	CH1, Slave	UDMA 5	ExcelStor Techno..	39GB	No-init
HDD3	CH2, Master	UDMA 5	IC35L120AVVA07-0	118GB	No-init
HDD4	CH2, Slave	UDMA 5	WDC WD1200JB-00CRA1	114GB	No-init

After click Apply button you will see the new Volume appear in this page.

Create a RAID 0 Volume

RAID level 0 is disk striping only, which distribute data evenly over multiple disks for better performance. It does not provide safeguards against failure. When you want to create a RAID 0 Volume, you should have **at least two or more un-used disks**.

1. Enter NAS homepage **Volume--> Create** page.
2. Input the Volume Name and select Volume Type to RAID 0
3. Select or multi-select specific disk from **Free Disks** list to **Volume Members** list.
4. Click **Apply** to finish the process.



Free Disks:

Device	Location	Mode	Model Name	Capacity	Status
HDD1	CH1, Master	UDMA 5	MAXTOR 6L080J4	76GB	No-init
HDD2	CH1, Slave	UDMA 5	ExcelStor Techno..	39GB	No-init
HDD3	CH2, Master	UDMA 5	IC35L120AVVA07-0	118GB	No-init
HDD4	CH2, Slave	UDMA 5	WDC WD12	114GB	No-init

New Volume Settings:

Volume Name:

Volume Type:

Select Volume Members

Free Disks: HDD3 - 118GB, HDD4 - 114GB

Volume Members: HDD1 - 76GB, HDD2 - 39GB

Callouts:
 1. Enter volume name and select the volume type
 2. Select or multi-select the disk
 3. Click the ">>" button to add selected disk(s) to Volume Members list



Volume View | **Device View**

List of Volumes:

Volume Name	Members	RAID Type	Free Space	Total Space	Status
RD	HDD1,2	RAID 0	115GB (100%)	115GB	Ready

Free Disks:

No Device

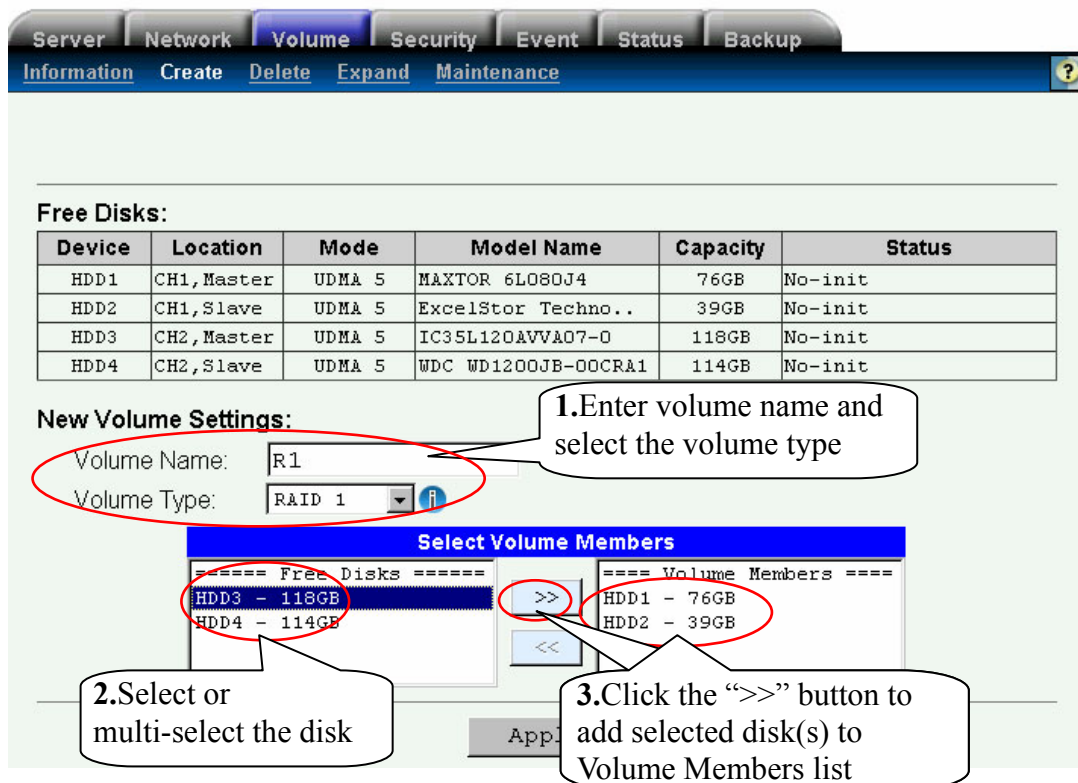
Device	Location	Mode	Model Name	Capacity	Status
HDD3	CH2, Master	UDMA 5	IC35L120AVVA07-0	118GB	No-init
HDD4	CH2, Slave	UDMA 5	WDC WD1200JB-00CRA1	114GB	No-init

Callout: After click Apply button you will see the new Volume appear in this page.

Create a RAID 1 Volume

RAID level 1 uses disk mirroring, which provides 100% duplication of data. It offers high reliability, but doubles storage cost. If you want to create a RAID 1 Volume, you should have **at least two un-used disks**.

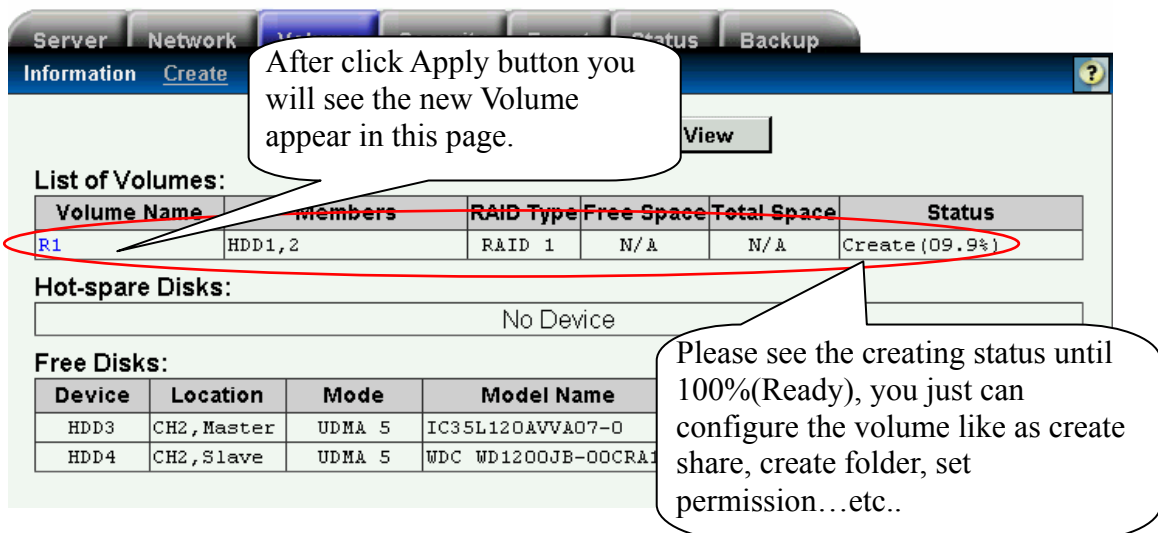
1. Enter NAS homepage **Volume--> Create** page.
2. Input the Volume Name and select Volume Type to RAID 1.
3. Select or multi-select specific disk from **Free Disks** list to **Volume Members** list.
4. Click **Apply** to finish the process.



The screenshot shows the 'Volume' management interface. At the top, there are tabs for 'Server', 'Network', 'Volume', 'Security', 'Event', 'Status', and 'Backup'. Below these are sub-tabs for 'Information', 'Create', 'Delete', 'Expand', and 'Maintenance'. The main content area is titled 'Free Disks:' and contains a table with the following data:

Device	Location	Mode	Model Name	Capacity	Status
HDD1	CH1, Master	UDMA 5	MAXTOR 6L080J4	76GB	No-init
HDD2	CH1, Slave	UDMA 5	ExcelStor Techno..	39GB	No-init
HDD3	CH2, Master	UDMA 5	IC35L120AVVA07-0	118GB	No-init
HDD4	CH2, Slave	UDMA 5	WDC WD1200JB-00CRA1	114GB	No-init

Below the table is the 'New Volume Settings:' section. The 'Volume Name' is set to 'R1' and the 'Volume Type' is set to 'RAID 1'. A callout points to these fields with the text: '1. Enter volume name and select the volume type'. Below this is the 'Select Volume Members' dialog box. It has two columns: 'Free Disks' and 'Volume Members'. In the 'Free Disks' column, 'HDD3 - 118GB' and 'HDD4 - 114GB' are selected. In the 'Volume Members' column, 'HDD1 - 76GB' and 'HDD2 - 39GB' are listed. A callout points to the '>>' button between the columns with the text: '3. Click the ">>" button to add selected disk(s) to Volume Members list'. Another callout points to the selected disks in the 'Free Disks' column with the text: '2. Select or multi-select the disk'. At the bottom of the dialog is an 'Apply' button.



The screenshot shows the 'Volume' management interface after the RAID 1 volume has been created. The 'List of Volumes:' section contains a table with the following data:

Volume Name	Members	RAID Type	Free Space	Total Space	Status
R1	HDD1,2	RAID 1	N/A	N/A	Create (09.9%)

Below this table is the 'Hot-spare Disks:' section, which shows 'No Device'. Below that is the 'Free Disks:' section, which contains a table with the following data:

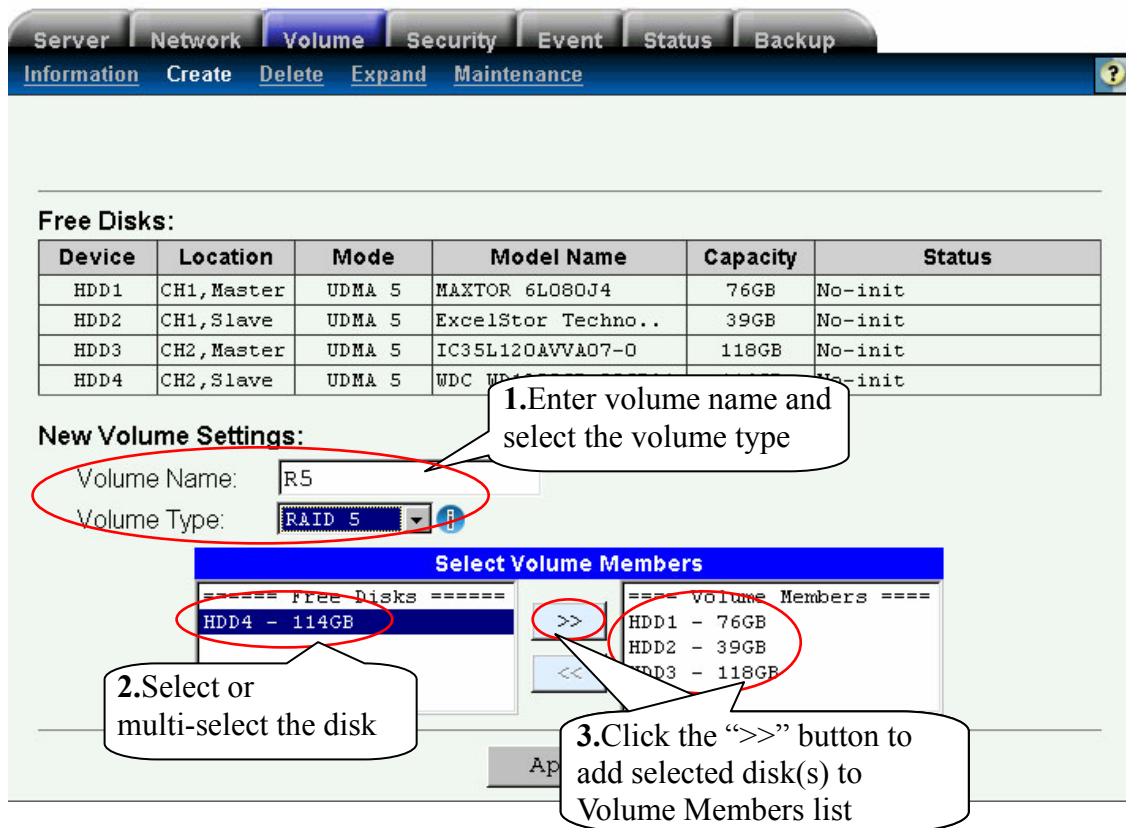
Device	Location	Mode	Model Name
HDD3	CH2, Master	UDMA 5	IC35L120AVVA07-0
HDD4	CH2, Slave	UDMA 5	WDC WD1200JB-00CRA1

A callout points to the 'Apply' button in the previous screenshot with the text: 'After click Apply button you will see the new Volume appear in this page.'. Another callout points to the 'Status' column of the 'List of Volumes' table with the text: 'Please see the creating status until 100%(Ready), you just can configure the volume like as create share, create folder, set permission...etc..'. The 'Status' cell 'Create (09.9%)' is circled in red.

Create a RAID 5 Volume

RAID level 5 distributes data and parity bits over multiple disks for both performance and fault tolerance. A RAID volume can still work when a hard disk fails. RAID level 5 uses **three or more hard disks**. Building a RAID-5 volume may take hours depending on capacity.

1. Enter NAS homepage **Volume--> Create** page.
2. Input the Volume Name and select Volume Type to RAID 5.
3. Select or multi-select specific disk from **Free Disks** list to **Volume Members** list.
4. Click **Apply** to finish the process.



Free Disks:

Device	Location	Mode	Model Name	Capacity	Status
HDD1	CH1, Master	UDMA 5	MAXTOR 6L080J4	76GB	No-init
HDD2	CH1, Slave	UDMA 5	ExcelStor Techno..	39GB	No-init
HDD3	CH2, Master	UDMA 5	IC35L120AVVA07-0	118GB	No-init
HDD4	CH2, Slave	UDMA 5	WDC HP		No-init

New Volume Settings:

Volume Name: R5
 Volume Type: RAID 5

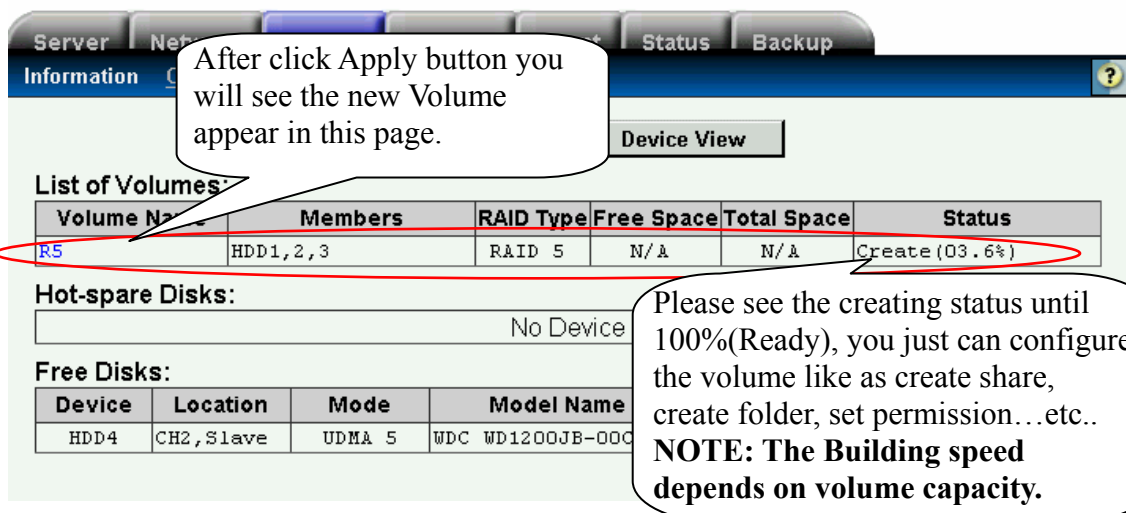
Select Volume Members

Free Disks: HDD4 - 114GB
 Volume Members: HDD1 - 76GB, HDD2 - 39GB, HDD3 - 118GB

1. Enter volume name and select the volume type

2. Select or multi-select the disk

3. Click the ">>" button to add selected disk(s) to Volume Members list



After click Apply button you will see the new Volume appear in this page.

List of Volumes:

Volume Name	Members	RAID Type	Free Space	Total Space	Status
R5	HDD1, 2, 3	RAID 5	N/A	N/A	Create (03.6%)

Hot-spare Disks: No Device

Free Disks:

Device	Location	Mode	Model Name
HDD4	CH2, Slave	UDMA 5	WDC WD1200JB-000

Please see the creating status until 100%(Ready), you just can configure the volume like as create share, create folder, set permission...etc..

NOTE: The Building speed depends on volume capacity.

Create a new folder

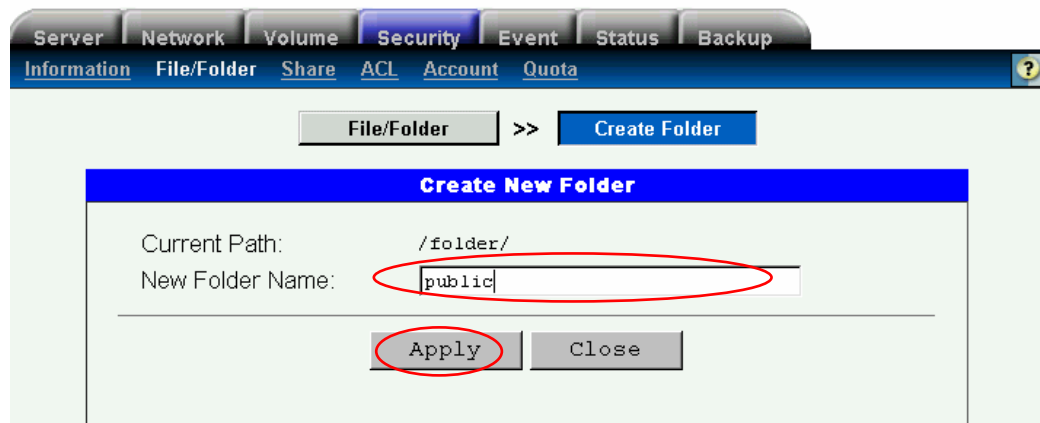
1. Enter NAStorage homepage **Security** --> **File/Folder** page
2. Enter the volume that you want to add a new folder.



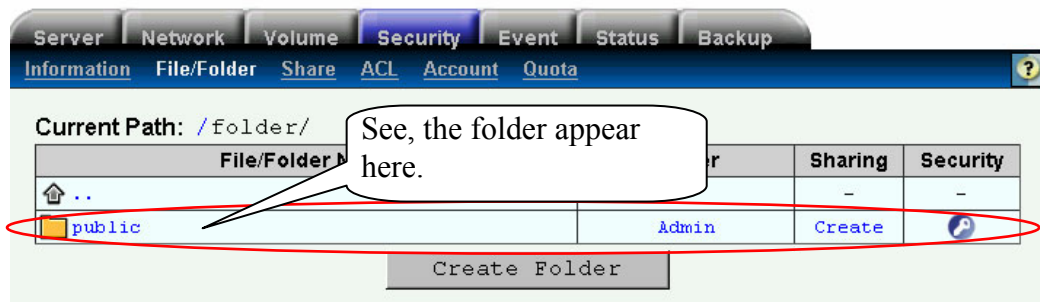
3. Click "Create Folder" button



4. Enter the folder name and click **Apply** button, the process done.

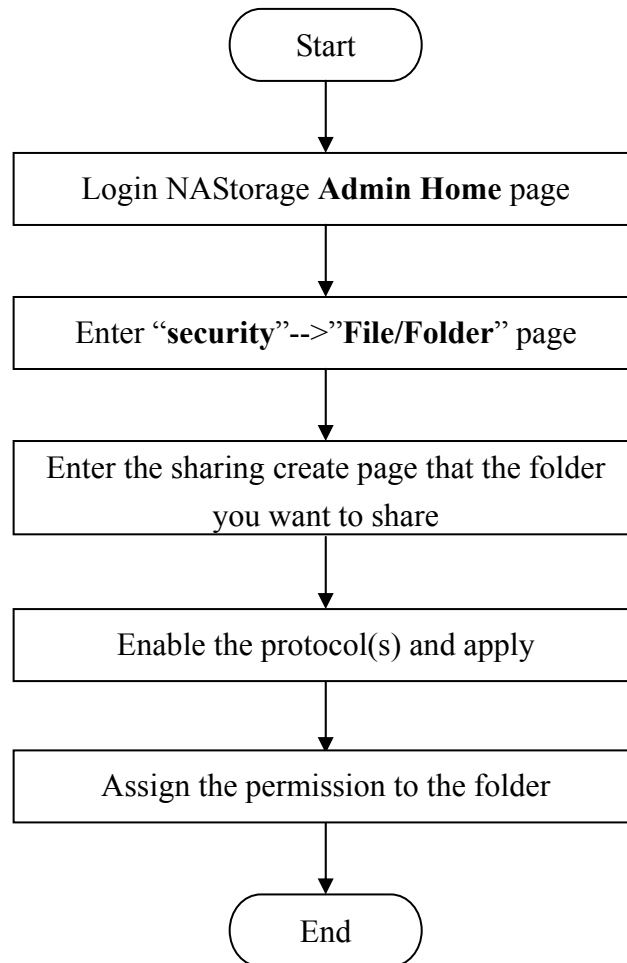


After the above process please click **Close** button to get back to previous screen.



How to create a Share in NAS?

You can share a specific folder in any volume created in the NAS Server with others on the network. When you create a share, you can assign the permission to the share that others will be allowed or denied when they access the share over the network.



Create a share

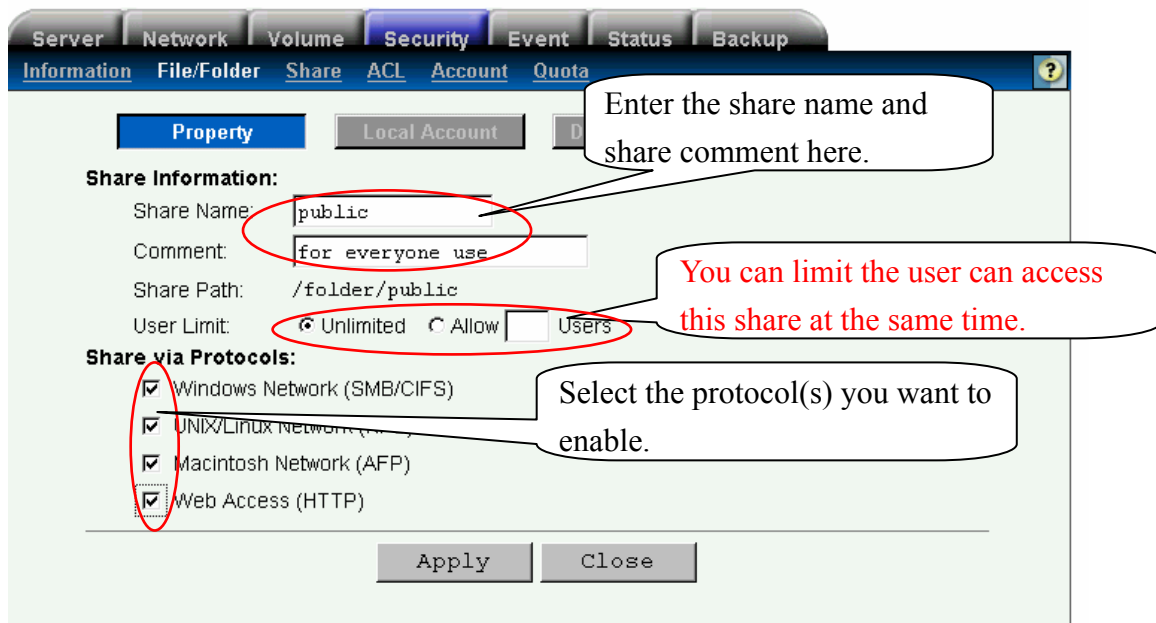
Enter **Security** --> **File/Folder** page and get into the volume include the folder you want to share.

Note: *You can share a volume as well.*

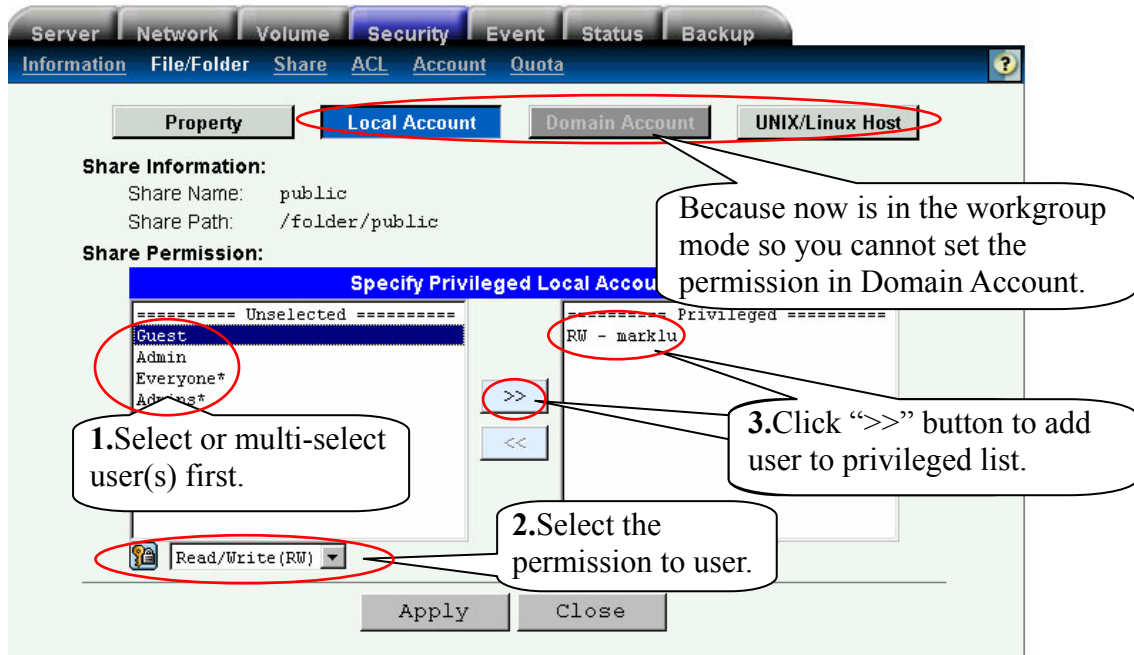
1. Select the folder you want to share and click the hyper link “**Create**”



2. Enter the share name, share comment and select which protocol you want to share. When done please click the **Apply** button.



3. Set the permission to the share. Select or multi-select specific user(s) from unselected list to privileged list. After that, click the **Apply** button.



After the above process please click **Close** button to get back to previous screen.

4. When the process complete the icon will change like below:



If you share a **volume** the icon will change like below:



Enter **Security** -> **Share** page; the share you just made will also appear here. In this page you can see all shares.



You can delete the share here by clicking the checkbox and the trash icon.

Share Name	Share Path	Permission	
public	/folder/public		<input type="checkbox"/>

Congratulations! Now you can see the share in network neighborhood (SMB).

