



NAS520/NAS326

Application Notes

Version 1.02
March, 2018



Contents

1. NAS Starter Utility	1
1.1 NAS Starter Utility Installation	1
1.2 NAS Initialization	2
1.3 Network Setting	3
1.4 DeskTop	4
1.5 Network Drive	5
1.6 Shared Folder	7
1.7 myZyXELcloud	8
1.8 Run the Initialization Wizard	9
2. myZyXELcloud-Agent	10
2.1 Sign in	10
2.1.1 Sign in with Facebook	10
2.1.2 Sign in with Google	12
2.1.3 Sign up	13
2.2 Pair NAS	15
2.3 Unpair NAS	18
3. Storage	20
3.1 Create Volume	21
3.1.1 Create single volume on RAID	22
3.1.2 Create Disk Group	25
3.2 Repair volume	30
3.3 Delete Volume	33
4. Administrator	34
4.1 Network	35
4.2 Auto-upload Service	39
4.3 Dropbox	45
4.4 Using the zDownload Folder	50
4.5 WebDAV	51
4.6 Media Server	54
5. PlayZone	57
5.1 File Browser	58
5.2 Application Zone	59
5.3 Playzone Settings	60

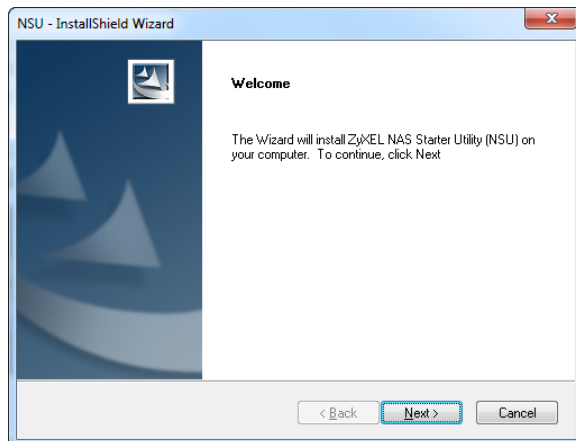
5.4 Music.....	61
5.5 Photo.....	62
5.6 Video	63
6. Status Center	65
7. External Volume	66
8. APP Center	67
8.1 Gallery.....	69
8.1.1 Installing Gallery from the Package Management	69
8.1.2 Configuring Gallery on the NAS	70
8.1.3 Check the photos in Gallery	72
8.2 Memopal.....	72
8.2.1 Installing Memopal from the Package Management.....	72
8.2.2 Configuring Memopal on the NAS	73
8.2.3 Check the backup status on the Memopal website.....	75
8.3 NFS	76
8.3.1 Installing NFS from the Package Management	76
8.3.2 Enable NFS server on the NAS.....	76
8.3.3 Configuring an NFS shared folder on the NAS	77
8.3.4 Enable the NFS service on Linux.....	79
8.3.5 Mount a Share of NAS NFS.....	79
8.3.6 Check the connection of the NAS	79
8.4 Transmission	80
8.4.1 Installing Transmission from the Package Management	80
8.4.2 Configuring Transmission on the NAS	81
8.4.3 Check the download status of Transmission on the NAS	82
8.5 WordPress	85
8.5.1 Installing WordPress from the Package Management.....	85
8.5.2 Using WordPress on the NAS	86
8.5.3 How to add a new post on WordPress.....	88
8.6 ownCloud.....	90
8.6.1 Installing ownCloud from the Package Management.....	90
8.6.2 Configuring ownCloud on the NAS	91
8.6.3 Back Up Files from a PC to the NAS	93
8.7 pyLoad	98

8.7.1 Installing pyLoad from the Package Management	98
8.7.2 Configuring pyLoad on the NAS.....	99
8.7.3 Check the Download Status on the pyLoad Page	101
8.8 TFTP	103
8.8.1 Installing TFTP from the Package Management	103
8.8.2 Enable TFTP server on the NAS.....	104
8.8.3 Set Up the TFTP Share Folder on the NAS	104
8.8.4 Client Access to the TFTP server	104
8.9 NZBGet	105
8.9.1 Installing NZBGet from the Package Management	105
8.9.2 Enable NZBGet Service on the NAS	105
8.9.3 Configuring NZBGet	106
8.9.4 Download a File from an HTTP Link to the NAS via NZBGet.....	108
8.9.5 Download a .NZB File via NZBGet.....	109
8.10 Logitech® Media Server.....	111
8.10.1 Installing Logitech® Media Server from the Package Management	111
8.10.2 Configuring Logitech® Media Server on the NAS.....	112
8.10.3 Playing the media content via Logitech® Media Server by SoftSqueeze	114
8.11 PHP-MySQL-phpMyAdmin	115
8.11.1 Installing PHP-MySQL-phpMyAdmin from the Package Management..	116
8.11.2 Configuring phpMyAdmin on the NAS.....	116
8.11.3 Example	118
9 DyDNS	120
9.1 Set up DyDNS on the NAS.....	120
10. Protect.....	122
10.1 Set up a Backup task on the NAS.....	122
10.2 Restore file from a remote location.....	126
11. Syslog Server	129
11.1 Configuring Syslog Server on the NAS	129
11.2 Example of How Syslog Server Works.....	130
12. Help	131
12.1 FAQ	132

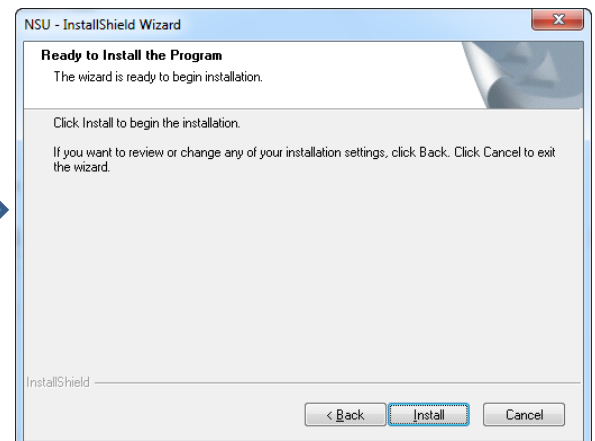
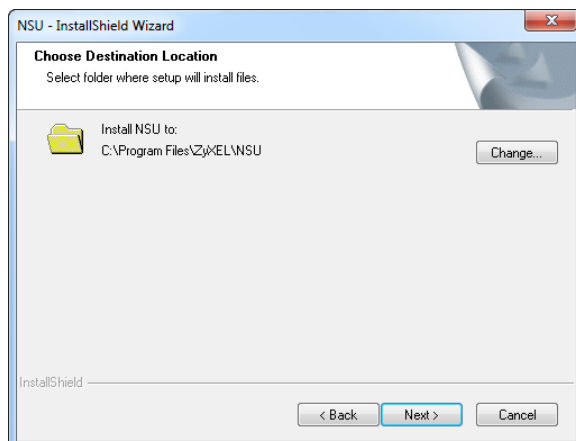
1. NAS Starter Utility

1.1 NAS Starter Utility Installation

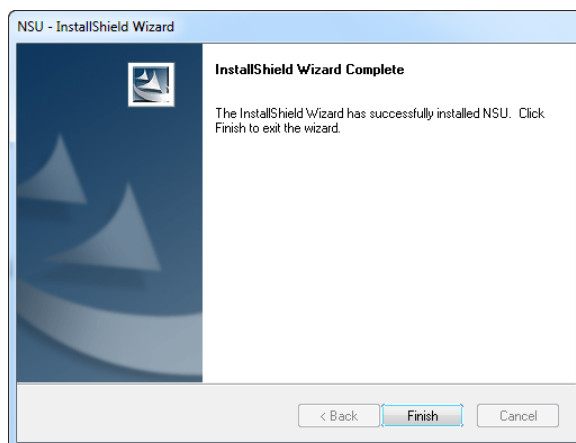
After you install a new hard drive on the NAS, please use the NAS Starter Utility to discover and access the NAS to assign an IP address by the DHCP server or a static option. The steps are shown below:



*Double-click setup.exe.
NSU_2.10_build_1064 then click “Next” to
begin the installation*



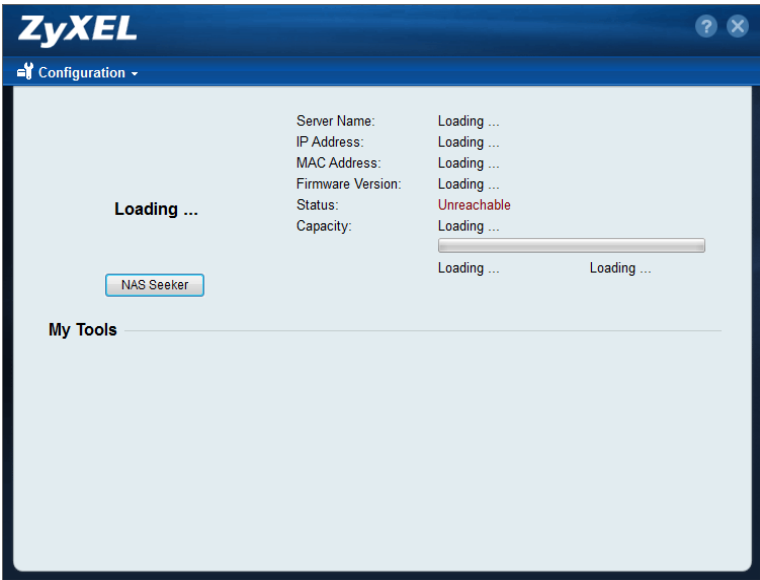
Select install folder



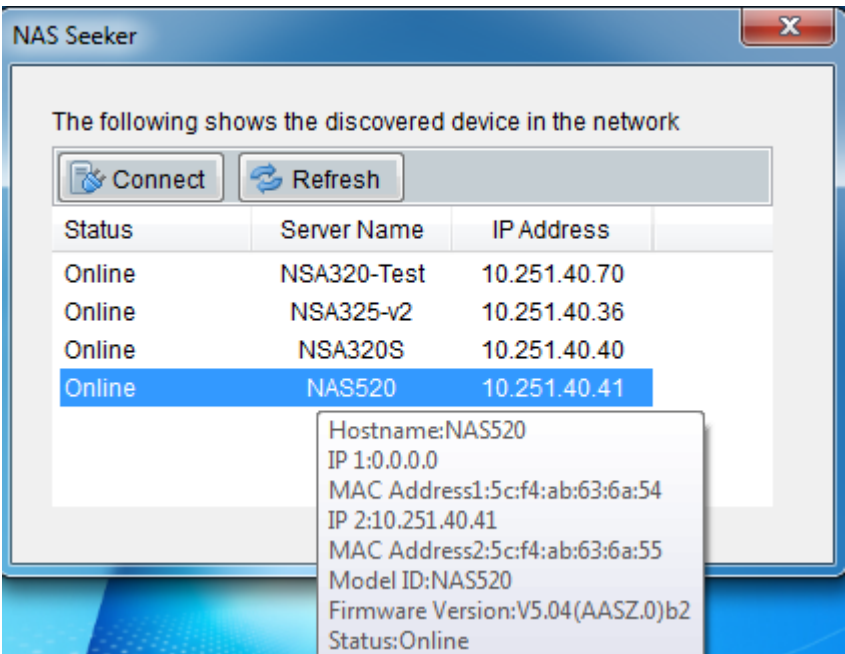
Finish Installation

1.2 NAS Initialization

After a successful installation, click on the **NAS Starter Utility**. The first screen of the NSU will attempt to discover the NAS devices. Click on **NAS Seeker**, and then choose the devices that you want to connect. The default username is **admin** and the password is **1234**.



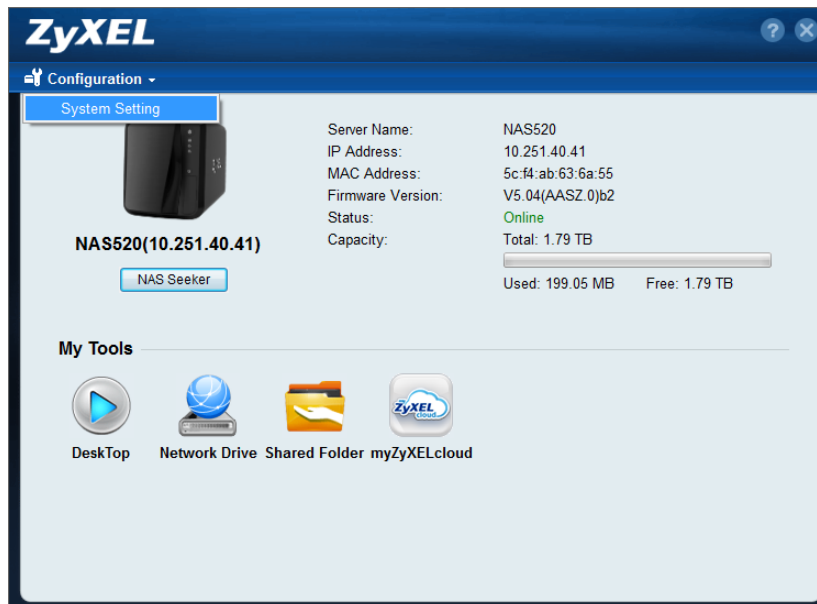
Discover NAS devices



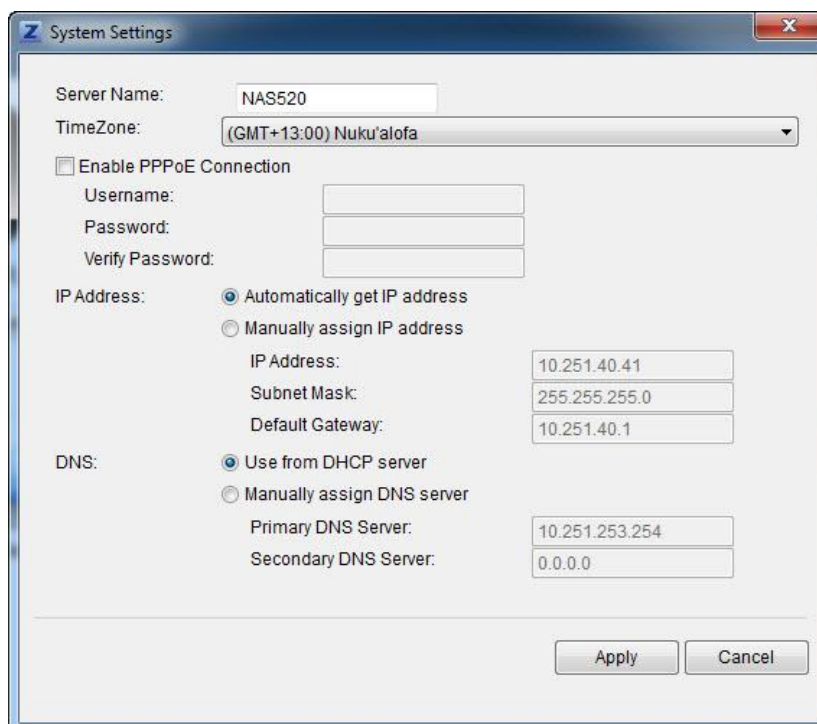
Select NAS520

1.3 Network Setting

After successful initialization, go back to the NSU main menu and click **Configuration > System Setting** to start configuring. You can assign a new hostname for this NAS, set the TimeZone and PPPoE connection information as well as an IP address.



Click **System Setting**



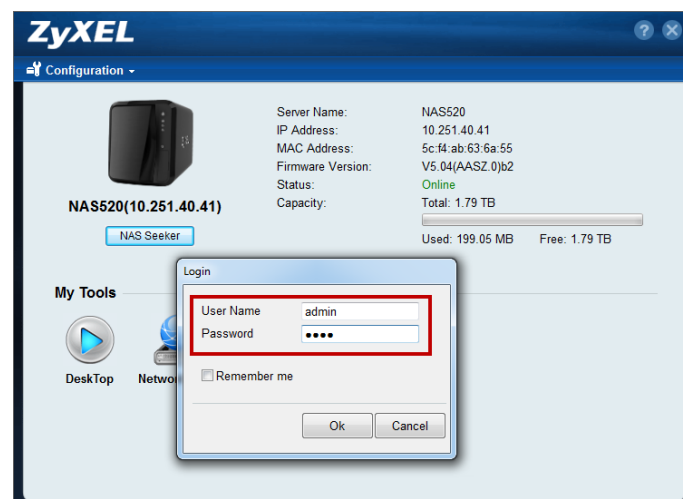
Setting Server Name,
TimeZone and network

1.4 DeskTop

Click on **DeskTop** and enter the admin's username and password to access the NAS's GUI. Then the administrator can manage the device and change the configurations.



Click **DeskTop**



Type User Name and Password



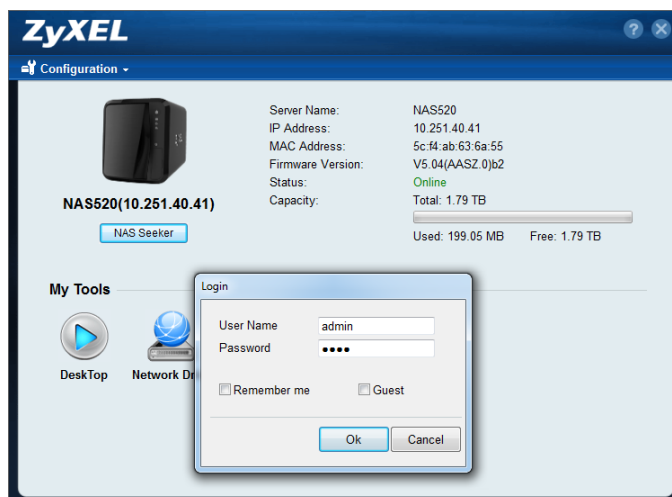
DeskTop screen

1.5 Network Drive

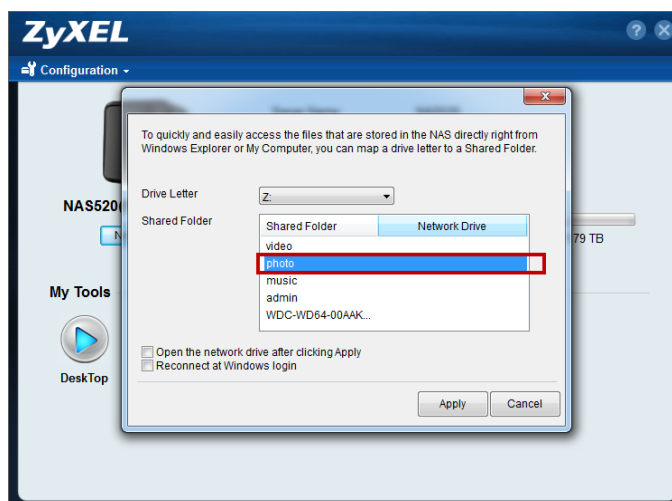
In the main NAS Starter Utility screen click **Network Drive** to add the NAS as a network drive in your computer's Windows Explorer.



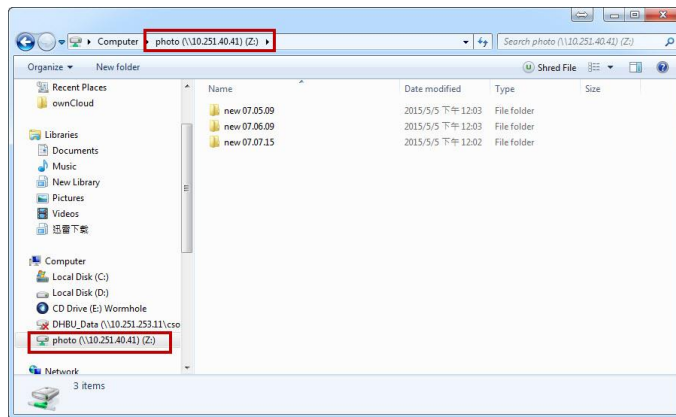
Click **Network Drive**



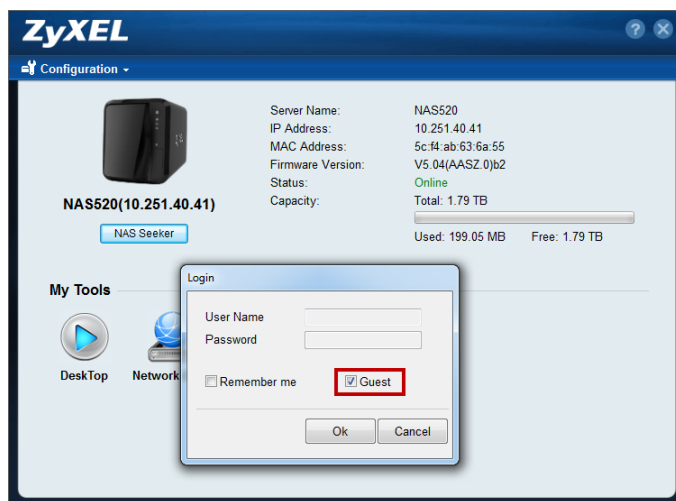
Type user name and password



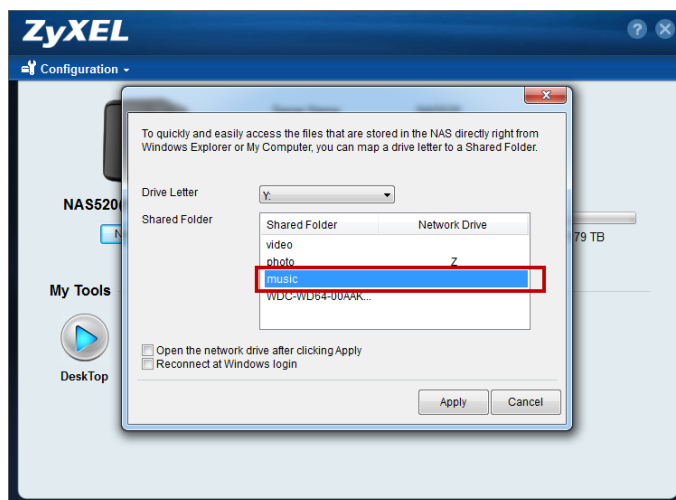
Select shared folder



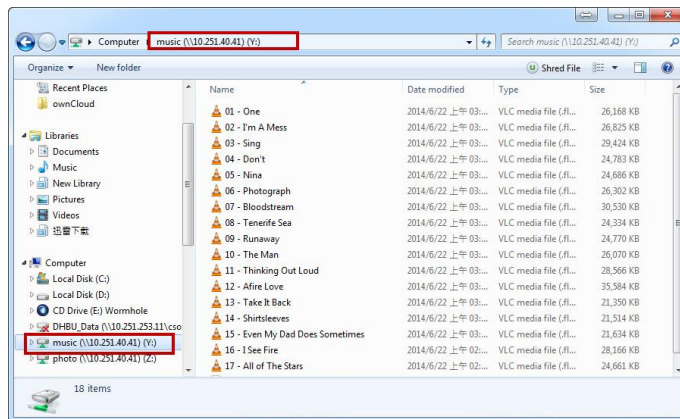
Check the Network map drive



Map the shared folder via Guest



Select shared folder



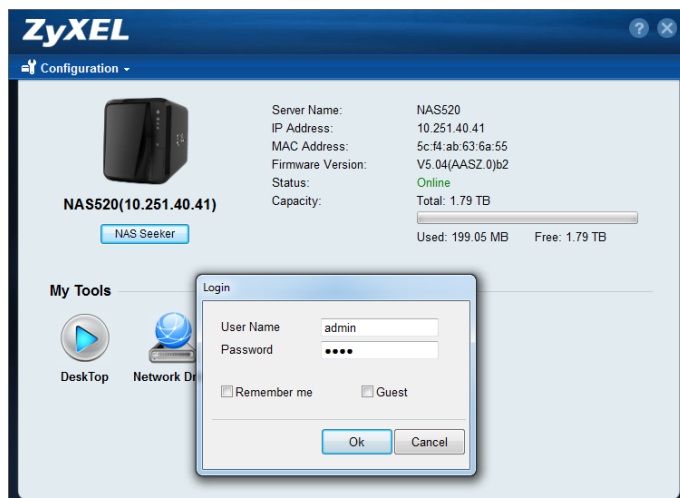
Check the Network map drive

1.6 Shared Folder

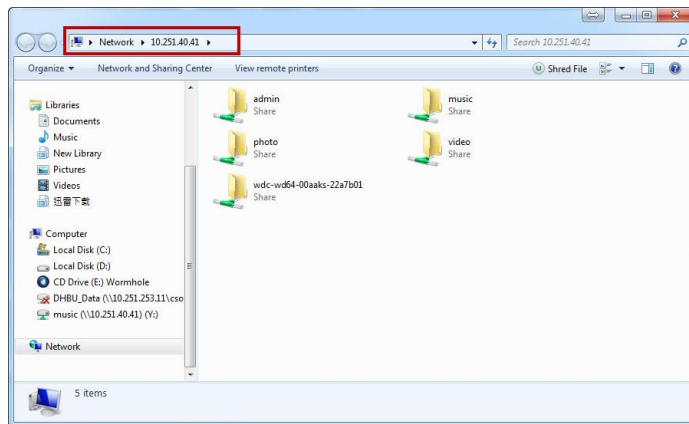
Click this to log into the NAS's file directory in Windows Explorer.



Select the Shared Folder



Type user name and password



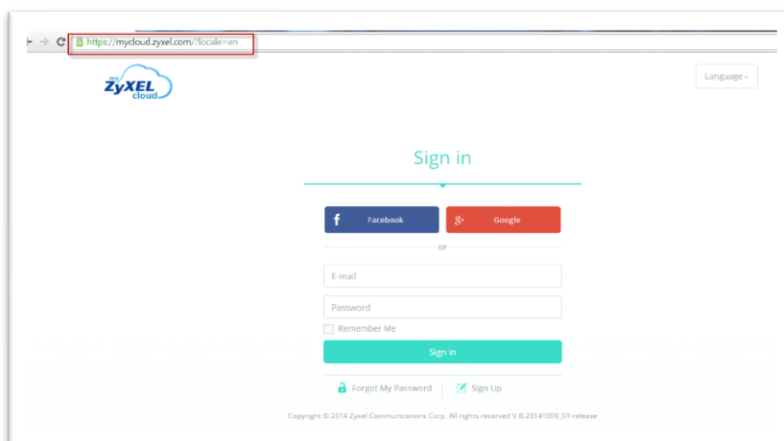
Check NAS's file directory in Windows Explorer

1.7 myZyXELcloud

Click this to go to mycloud.zyxel.com to setup a free DDNS hostname for the NAS so you can connect to it easily from the Internet.



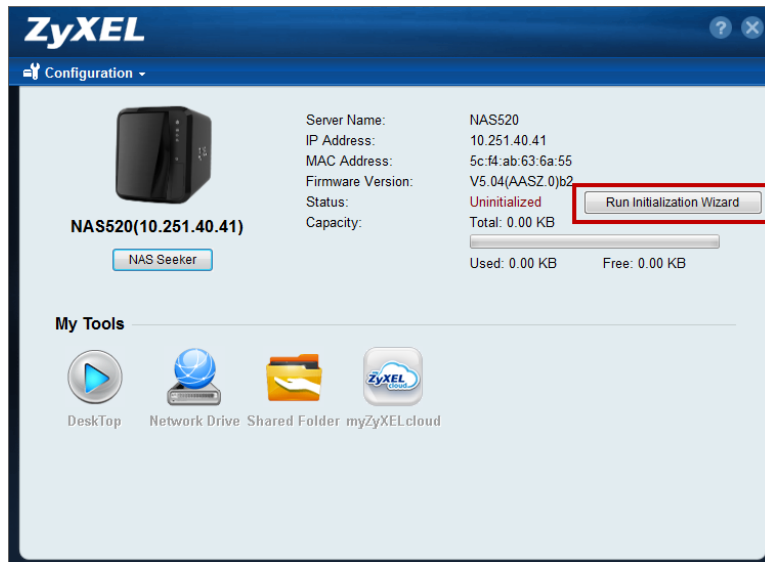
Click the **myZyXELcloud**



myZyXELcloud screen

1.8 Run the Initialization Wizard

Then click **Run Initialization Wizard** to create volume for NAS, and enter the user name and password on the **DeskTop** page.



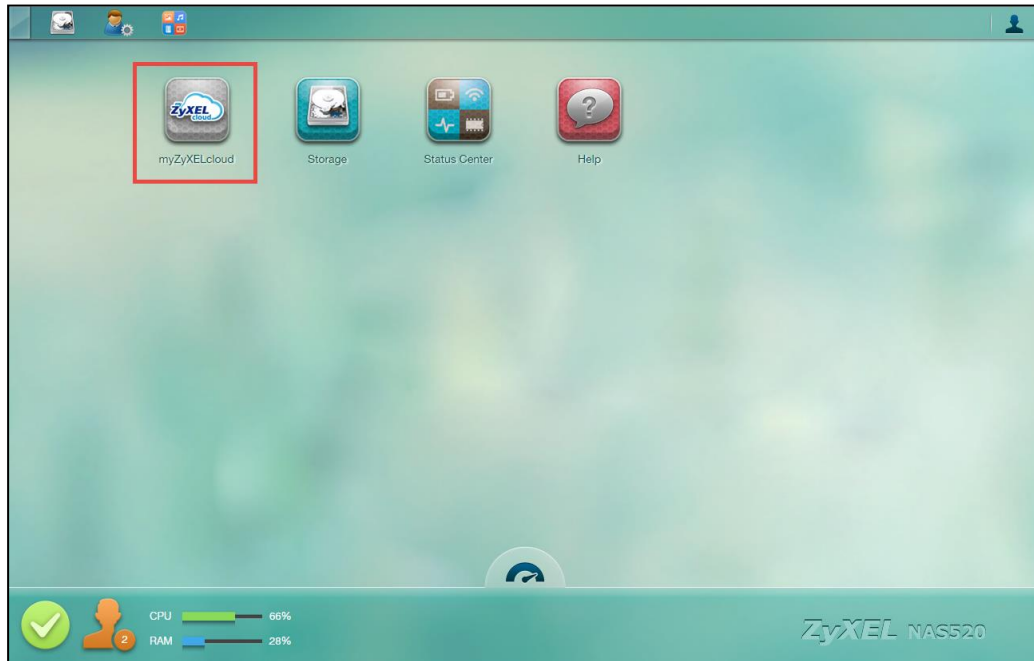
Run Initialization



DeskTop screen

2. myZyXELcloud-Agent

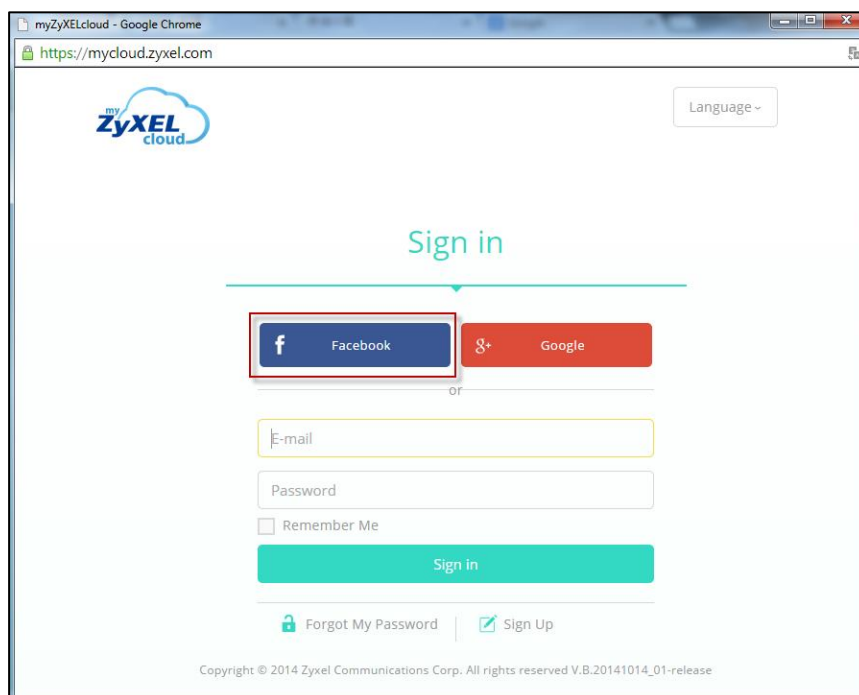
Provide a solution for remote application management and access your ZyXEL network storage accessory.



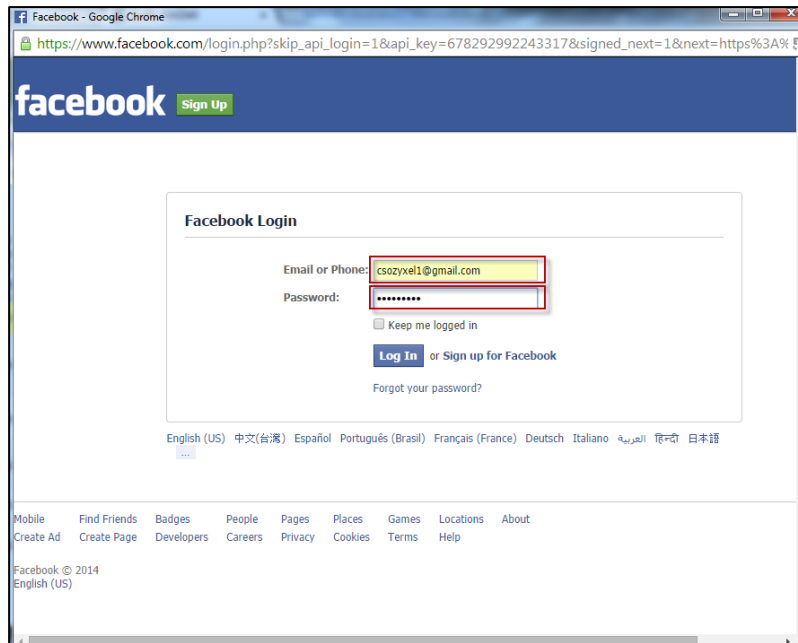
DeskTop -> myZyXELcloud

2.1 Sign in

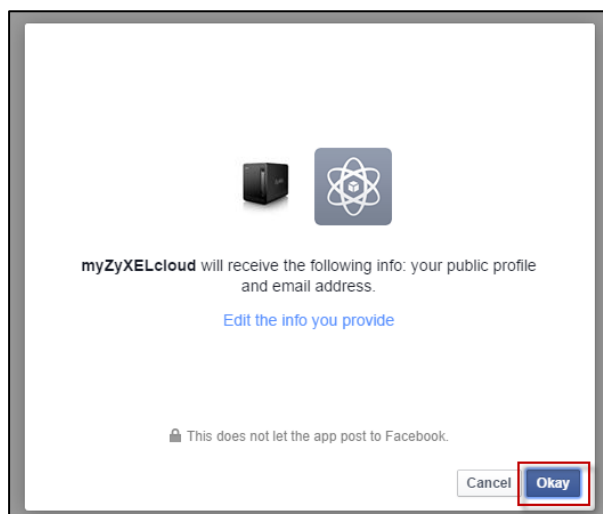
2.1.1 Sign in with Facebook



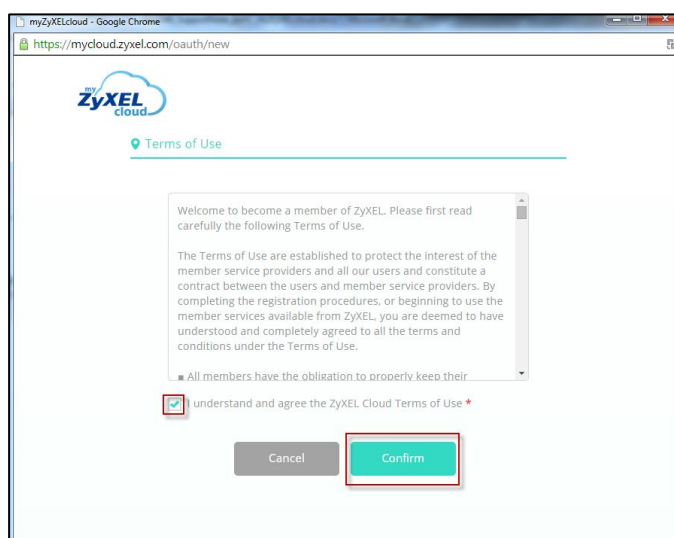
Click on the **Facebook** button



Login to Facebook with your account



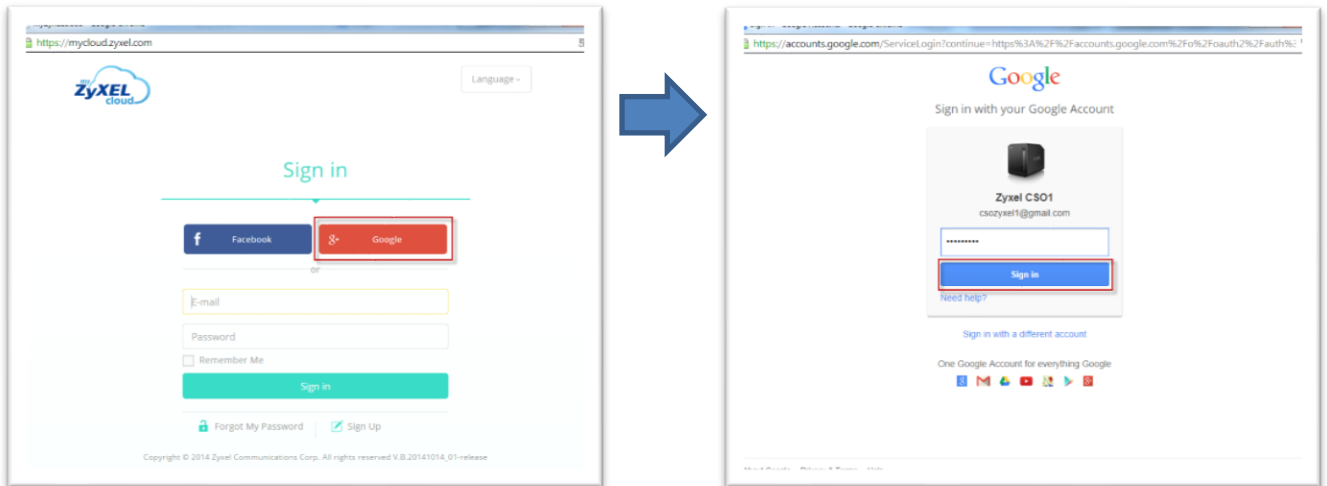
*Confirm **myZyXELcloud** will receive some information*



Confirm the Terms

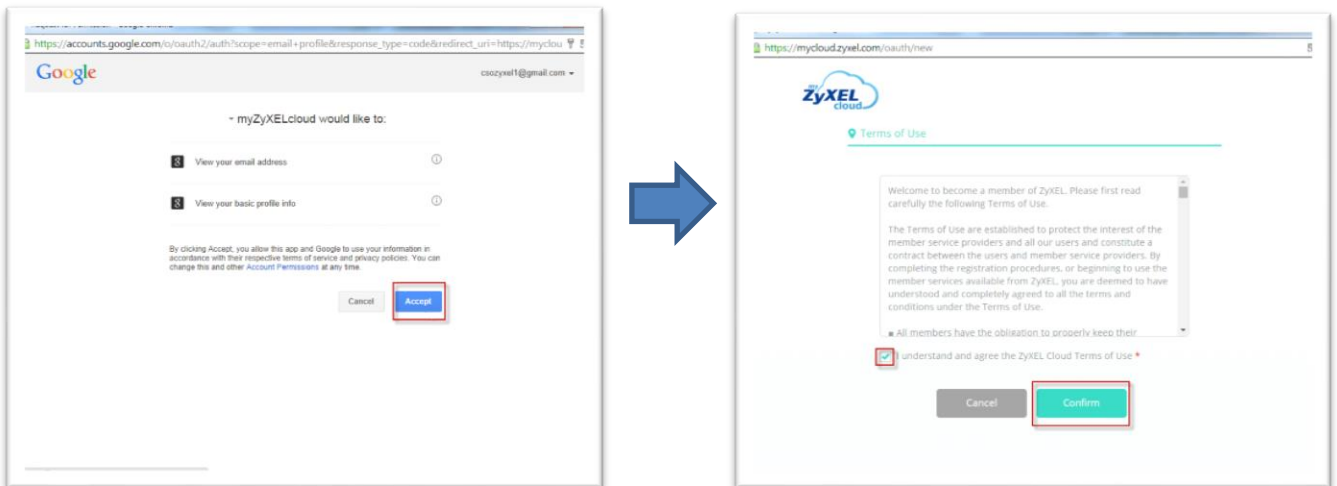
2.1.2 Sign in with Google

Click on the Google button and login with your Google account.



Click on the **Google** button

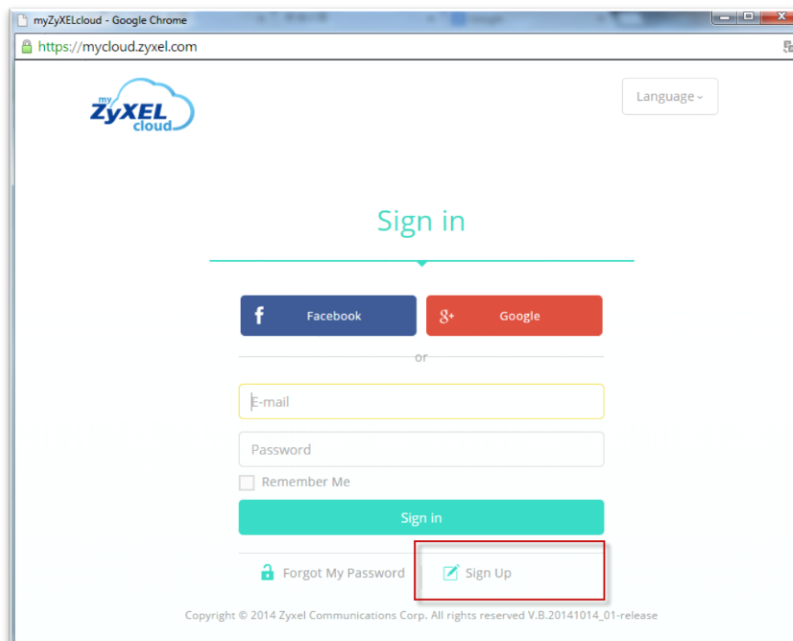
Confirm that myZyXELcloud will receive some information as well as the terms.



Confirm terms

2.1.3 Sign up

Click on **sign up**.



myZyXELcloud - Google Chrome
https://mycloud.zyxel.com

Language ~

myZyXEL cloud

Sign in

Facebook Google

or

E-mail

Password

☐ Remember Me

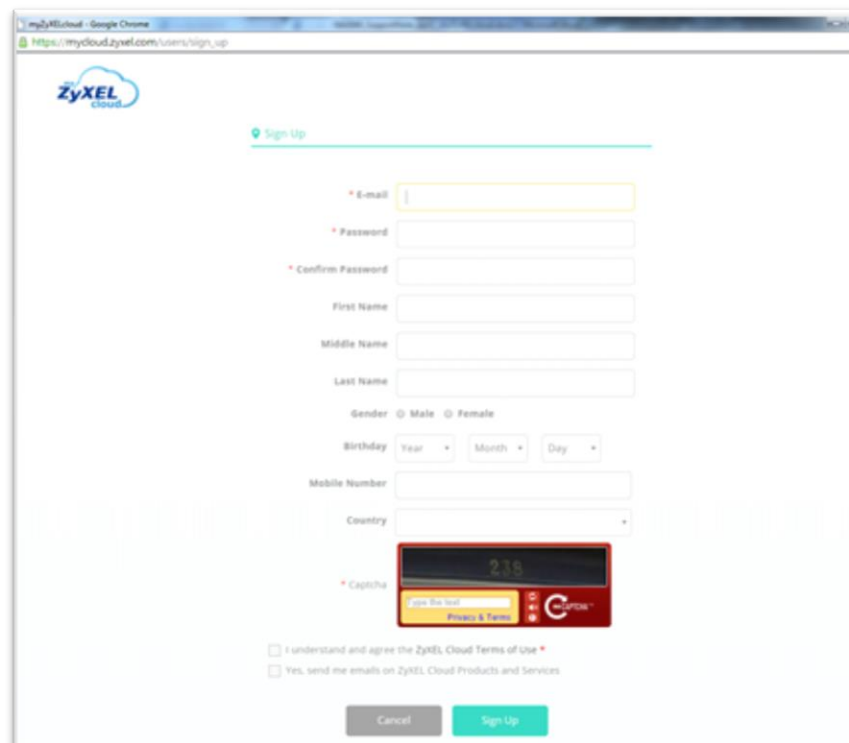
Sign in

[Forgot My Password](#) [Sign Up](#)

Copyright © 2014 Zyxel Communications Corp. All rights reserved V.B.20141014_01-release

Sign up in this screen

Fill-in the fields on this page.



myZyXELcloud - Google Chrome
https://mycloud.zyxel.com/users/sign_up

myZyXEL cloud

Sign Up

* E-mail

* Password

* Confirm Password

First Name

Middle Name

Last Name

Gender ☐ Male ☐ Female

Birthday Year Month Day

Mobile Number

Country

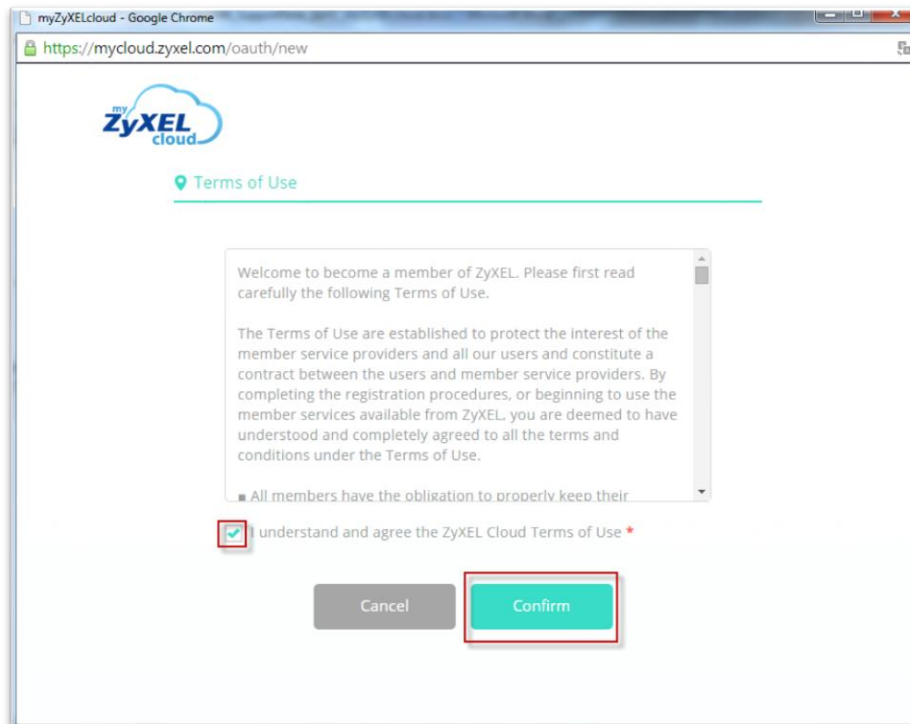
* Captcha

☐ I understand and agree the ZyXEL Cloud Terms of Use *

☐ Yes, send me emails on ZyXEL Cloud Products and Services

Cancel Sign Up

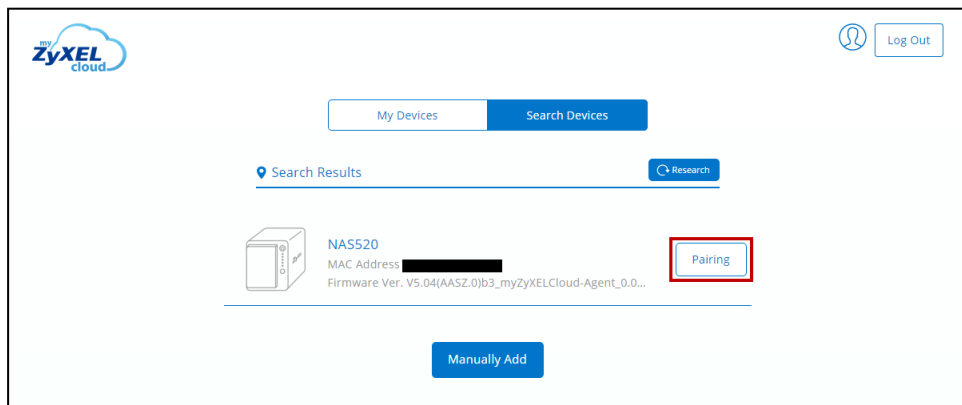
Sign up screen



Confirm the Terms

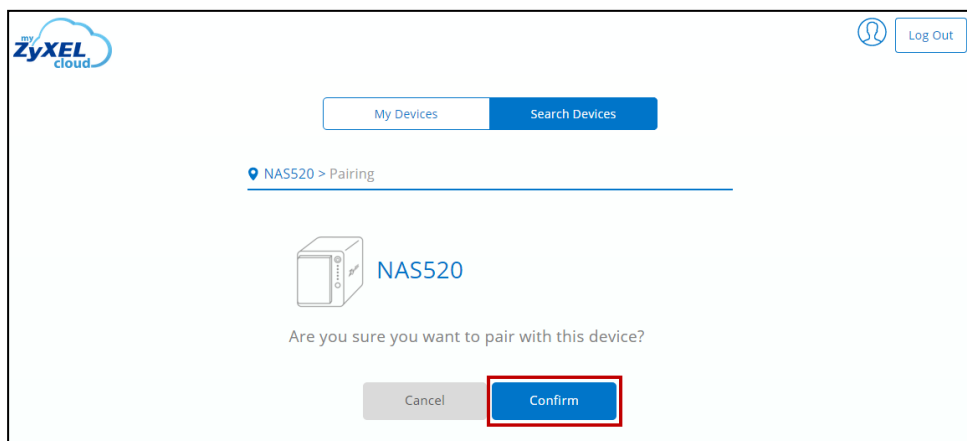
2.2 Pair NAS

myZyXELcloud will search for the NAS in the network.

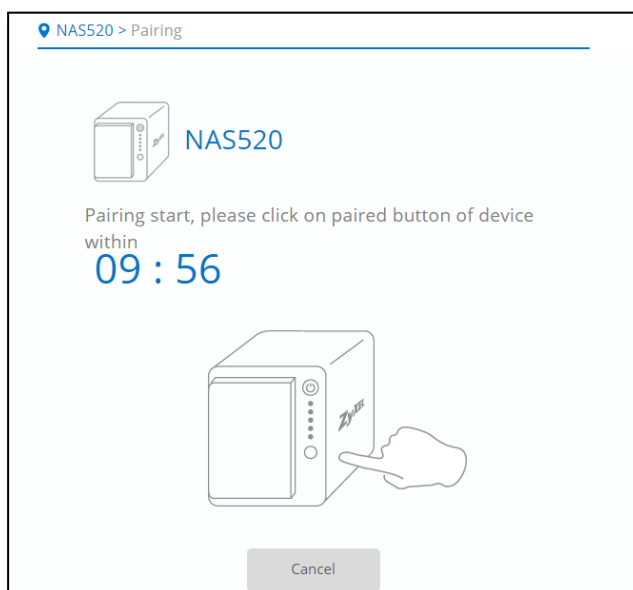


Click on the **Pairing** button

Confirm to pair with this NAS.

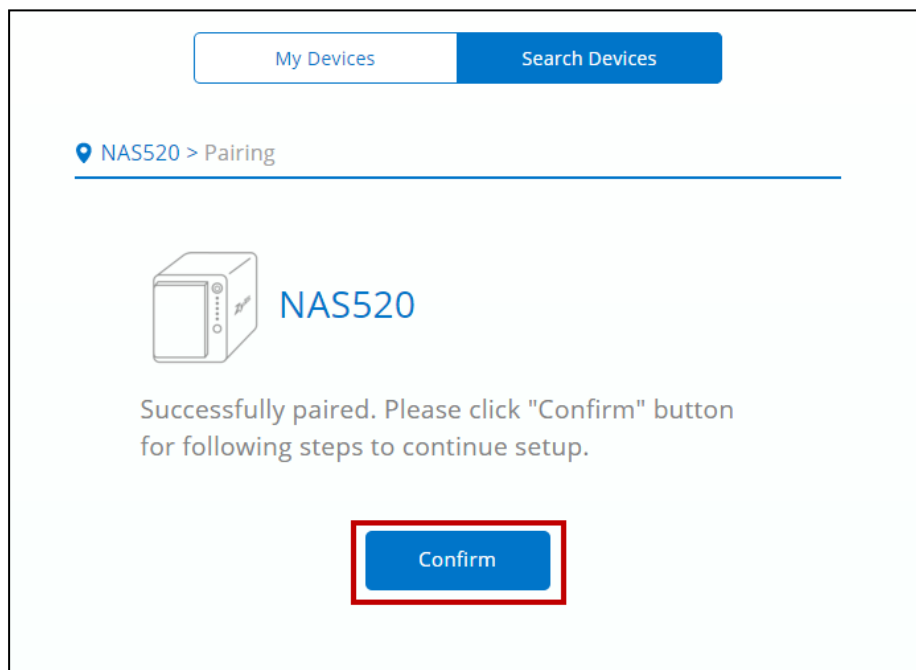


Press the **confirm** button



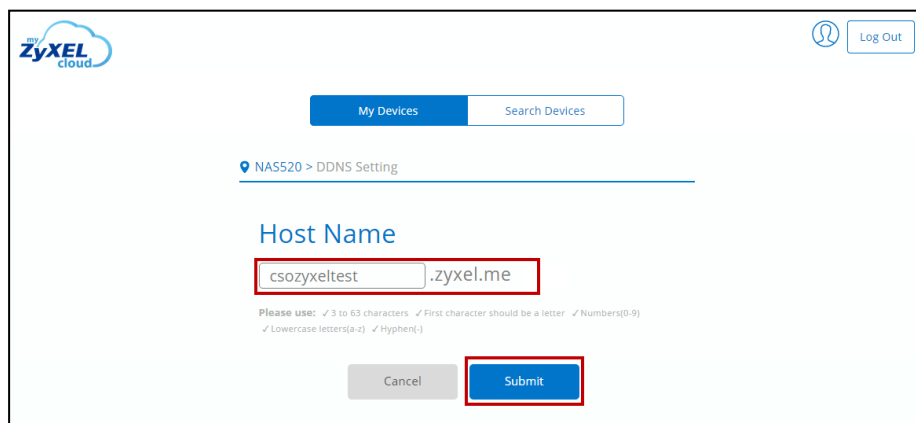
Click on the copy/sync button within 10 minutes

Successfully paired. Click on the **Confirm** button to setup DDNS and UPnP.



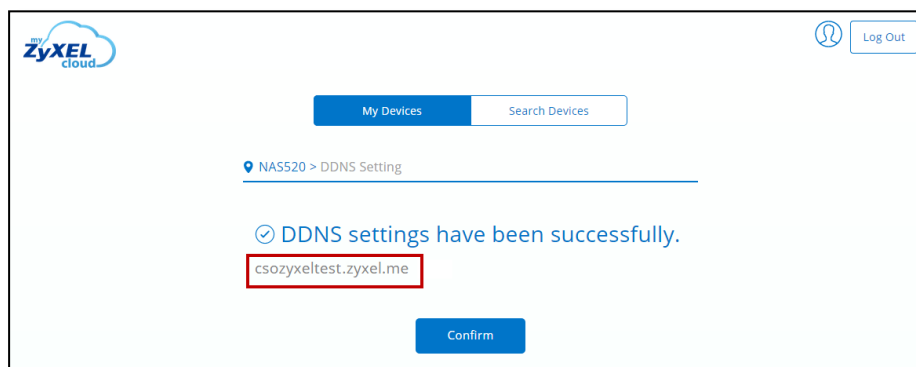
Successfully paired

Fill-in the host name that you want.



Submit

DDNS settings have been completed successfully.



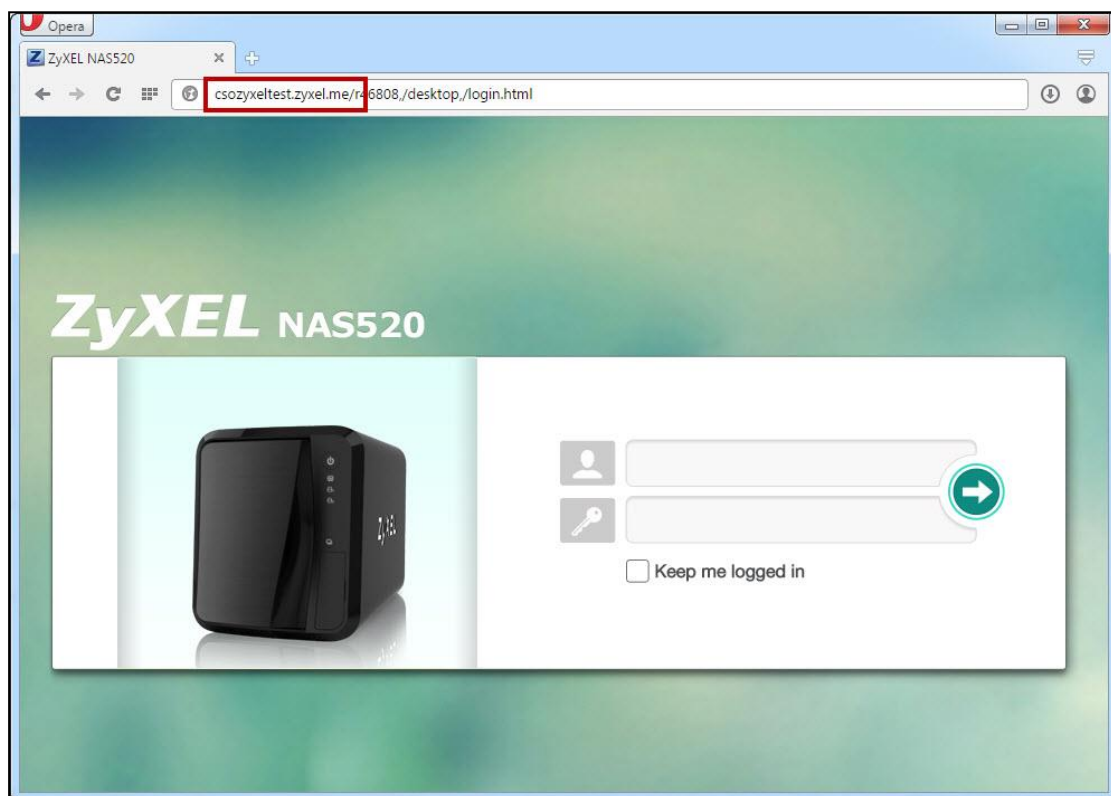
Confirm your DDNS

Setup the UPnP setting.

Enabled	Status	Service Name	Description
<input checked="" type="checkbox"/>	OK	AFP	Apple Filing Protocol
<input checked="" type="checkbox"/>	OK	CIFS	Windows File Service
<input checked="" type="checkbox"/>	OK	FTP	FTP Server
<input checked="" type="checkbox"/>	OK	GALLERY_HTTP	This web-based application allows your NAS to host pictures. Use the NAS administrator credentials to log in. The administrator can then create accounts for other users.
<input checked="" type="checkbox"/>	OK	HTTP	Web Server
<input checked="" type="checkbox"/>	OK	NZBGET	This package downloads .nzb file from Usenet. Default username:nzbget password:1234
<input checked="" type="checkbox"/>	OK	TELNET	Telnet Service
<input checked="" type="checkbox"/>	OK	PHP-MYSQL-PHPMYADMIN_HTTPS	This tool can be used to manage MySQL through the web. Enter 'root' as the username and '1234' as the password to log in.
<input checked="" type="checkbox"/>	OK	WORDPRESS_HTTPS	This allows you to create and manage a blog. Use the NAS administrator credentials to log in. The administrator can then create accounts for other users.

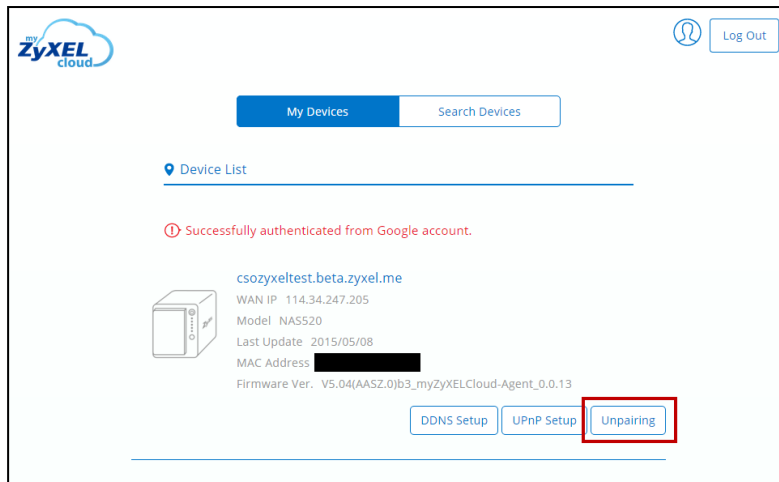
UPnP Setting screen

Access GUI of the NAS via DDNS from the Internet.



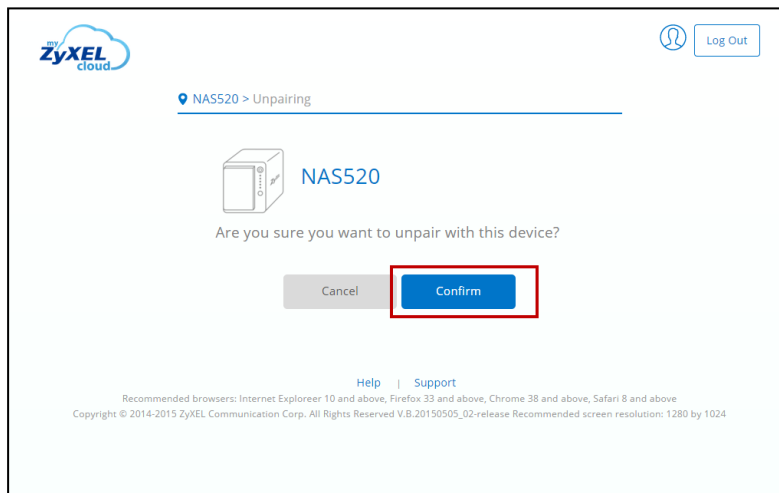
Successfully accessed

2.3 Unpair NAS



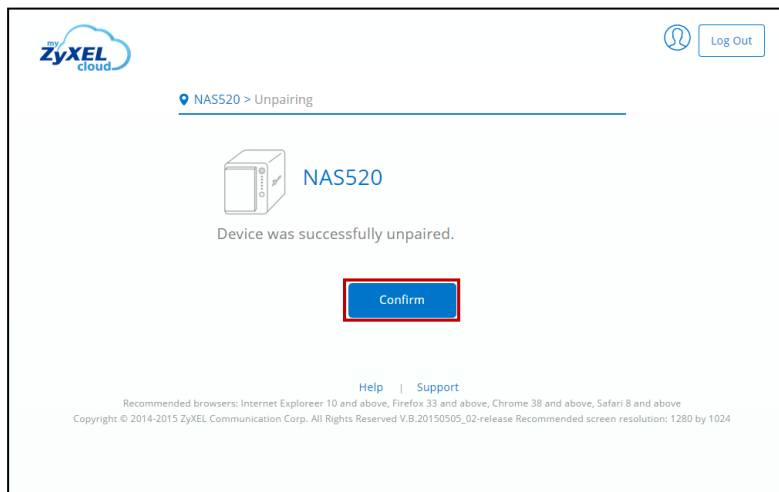
Press the **Unpairing** button

Confirm that you will unpair this NAS.



Press the **Confirm** button

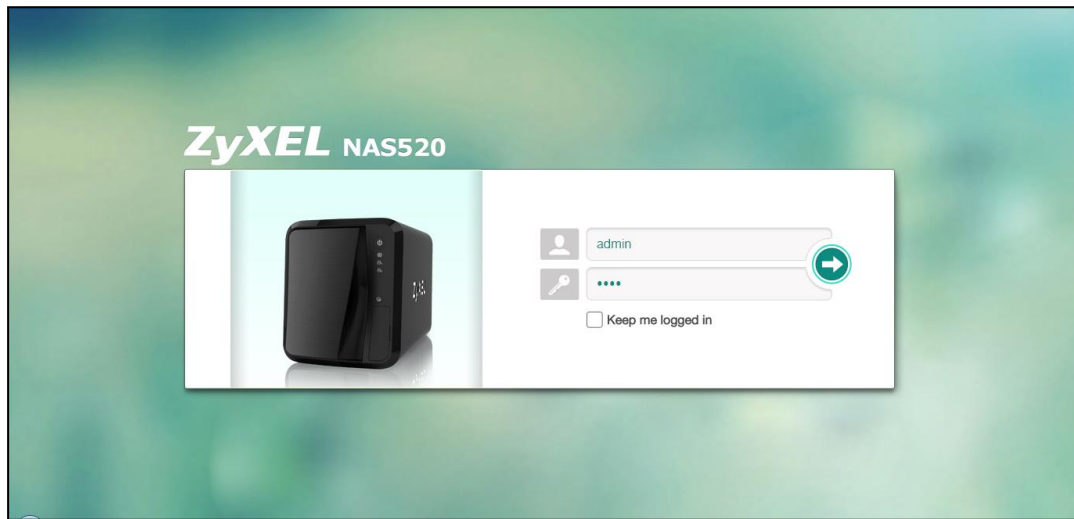
Device was successfully unpaired.



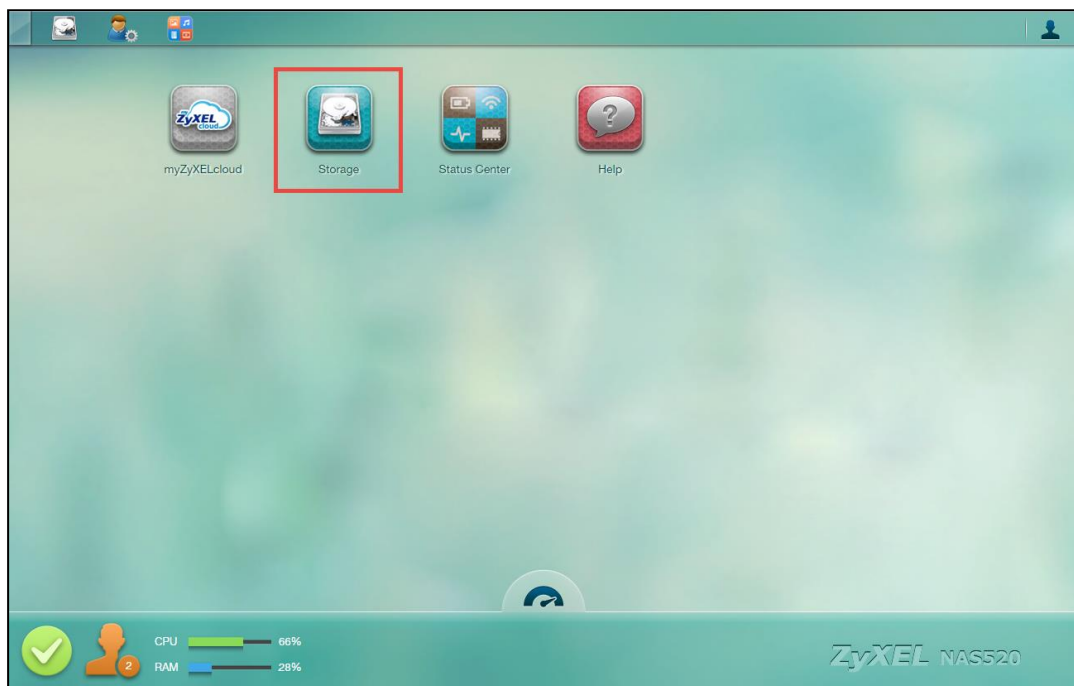
Successfully unpaired

3. Storage

Click on this to open the storage configuration screens.



Type user name and password



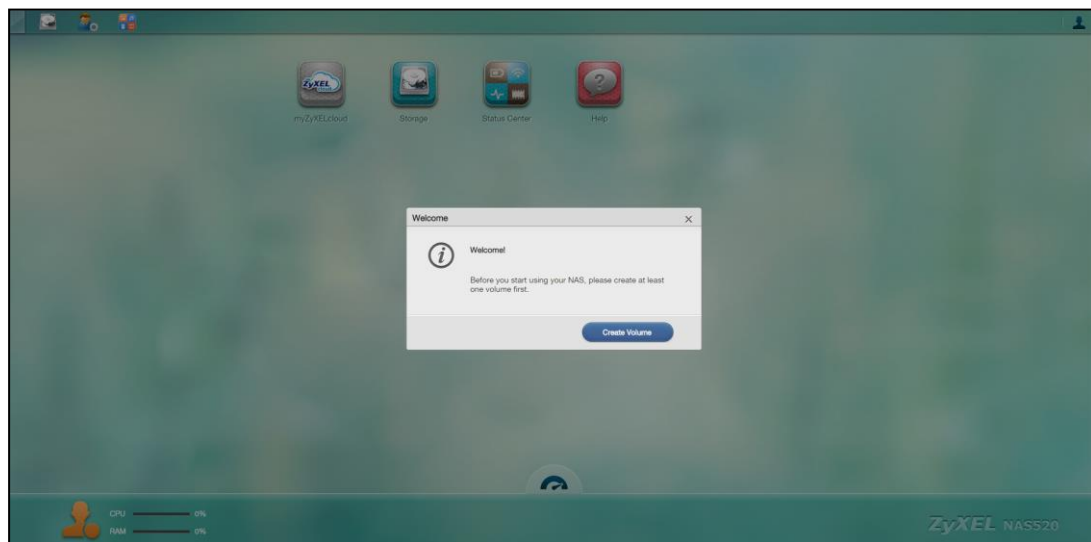
Click on **Storage**

RAID Types

RAIDTYPE	NO. OFHDD	NO. OF HDDALLOWED TO FAIL	DESCRIPTION	CAPACITY
Basic	1	0	Use Basic with one disk. It has no fault tolerance.	1 x (HDD size)
JBOD	2-4	0	Use JBOD with two or more disks for maximum capacity. This is just a collection of disks with no fault tolerance.	sum of HDD sizes
RAID 0	2-4	0	Use RAID 0 with two or four disks for maximum speed and no fault tolerance.	sum of HDD sizes
RAID 1	2-4	(No. of HDD) - 1	Use RAID 1 to create an exact copy of data on one disk to a second disk. Use this with two to four disks to mirror primary data to another disk(s) with high performance. You can add a hot spare to a 2-disk RAID 1.	Smallest HDD size
RAID 5	3-4	1	Use RAID 5 with three or four disks to balance performance and hard disk capacity usage with data protection in case of disk failure. You can add a hot spare to a 3-disk RAID 5.	(No. of HDD - 1) x (smallest HDD size)
RAID 6	4	2	Use RAID 6 with four disks for more data protection in case of disk failure.	(No. of HDD - 2) x (smallest HDD size)
RAID 10	4	1 HDD in each RAID 1 group	Use RAID 10 with four disks to get better performance than RAID 6, with slightly less data protection.	(No. of HDD / 2) x (smallest HDD size)

3.1 Create Volume

Choose Create Volume button (this message displayed when NAS is without a volume).



Create Volume button

Choose Create single volume on RAID or Create Multiple volumes on disk group button.

Create Volume

Choose an Action

☒ Create single volume on RAID
This type of volume is directly built on RAID. It has better access performance than a volume on a disk group.

☐ Create Multiple volumes on disk group
This type of volume is created on disk group. You can expand its size after creation if the disk group has unallocated storage. You can also expand a disk group to provide unallocated storage which you can use to expand a volume.

Next Cancel

Select **Create single volume on RAID**

3.1.1 Create single volume on RAID

Select disks and RAID type for your single volume.

For data protection purposes, we recommend that users use **Recommended RAID** type.

Create Volume

① Select Disks and RAID Type / ② Summary

1. Select disks ⓘ

	Disk Name	Size	Model Name
<input checked="" type="checkbox"/>	Disk1	1.82 TB	ATA WDC WD20EFRX-68A 80.0
<input checked="" type="checkbox"/>	Disk2	1.82 TB	ATA WDC WD20EFRX-68E 82.0

2. Choose a RAID type

RAID 1 (Recommended)

1.82 TB 1.82 TB

Available For data protection wasted

Note:
RAID 1 offers data protection. Adding disks enhances its reliability, but does NOT increase its storage capacity and may slow down the performance.

Back Next Cancel

Select disks and RAID type

Select a RAID type from the drop-down list.

Create Volume

① Select Disks and RAID Type / ② Summary

1. Select disks ⓘ

<input checked="" type="checkbox"/>	Disk Name	Size	Model Name
<input checked="" type="checkbox"/>	Disk1	1.82 TB	ATA WDC WD20EFRX-68A 80.0
<input checked="" type="checkbox"/>	Disk2	1.82 TB	ATA WDC WD20EFRX-68E 82.0

2. Choose a RAID type

RAID 1 (Recommended)

JBOD

RAID 0

RAID 1 (Recommended)

Note:
RAID 1 offers data protection. Adding disks enhances its reliability, but does NOT increase its storage capacity and may slow down the performance.

1.82 TB Available 1.82 TB For data protection

Back Next Cancel

NAS520 support JBOD, RAID0, RAID1

Create Volume

① Select Disks and RAID Type / ② Summary

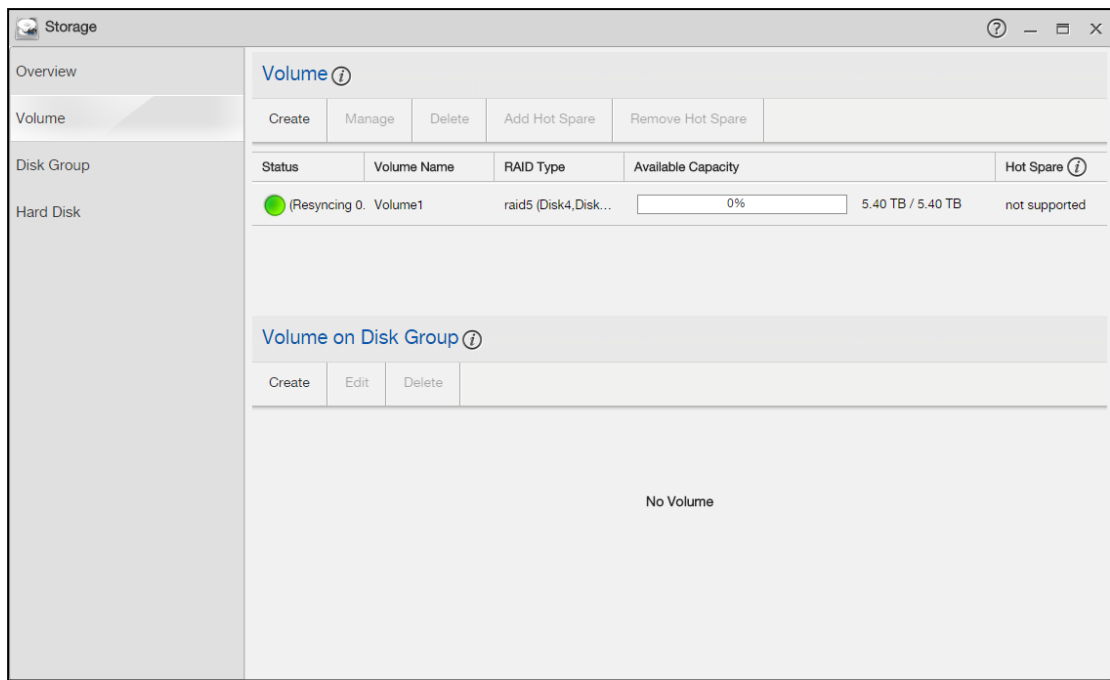
Item	Value
Disk Selected	Disk1, Disk2
RAID Type	RAID1
Volume Type	Single volume on RAID (no disk group)
Volume Name	Volume1
Volume Capacity	1.82 TB

Back Apply Cancel

Volume information

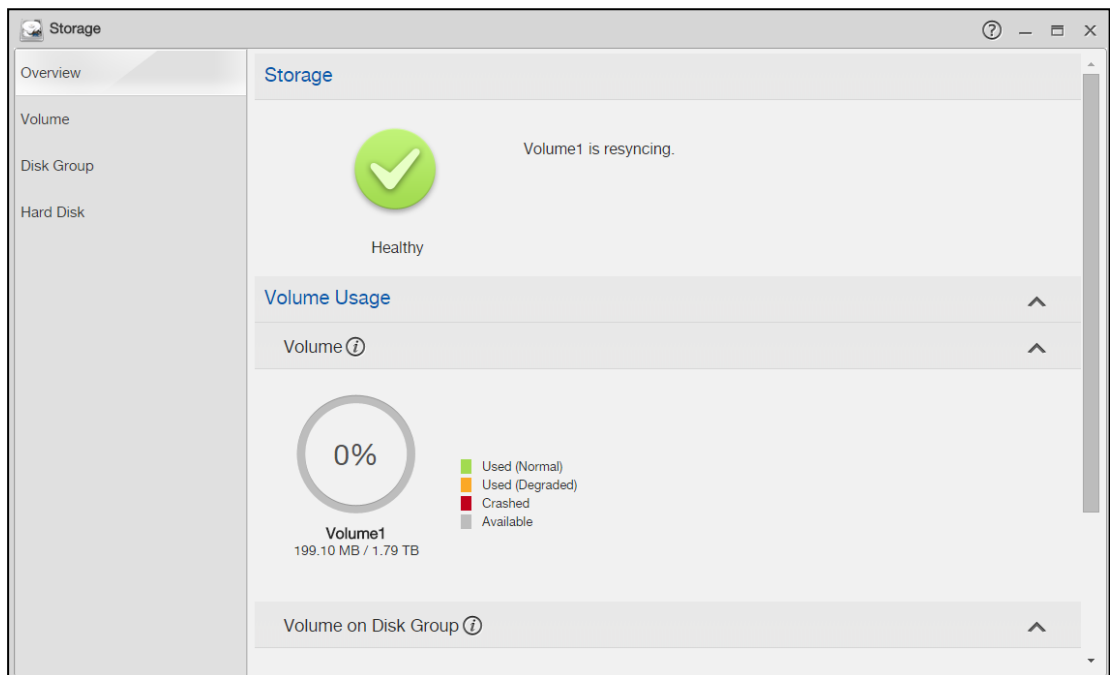
Go to **Desktop -> Storage**

Use the Storage screens to configure disk groups and volumes.
This page shows the current storage usage for each volume built directly on top of a RAID.



Check the Volume status

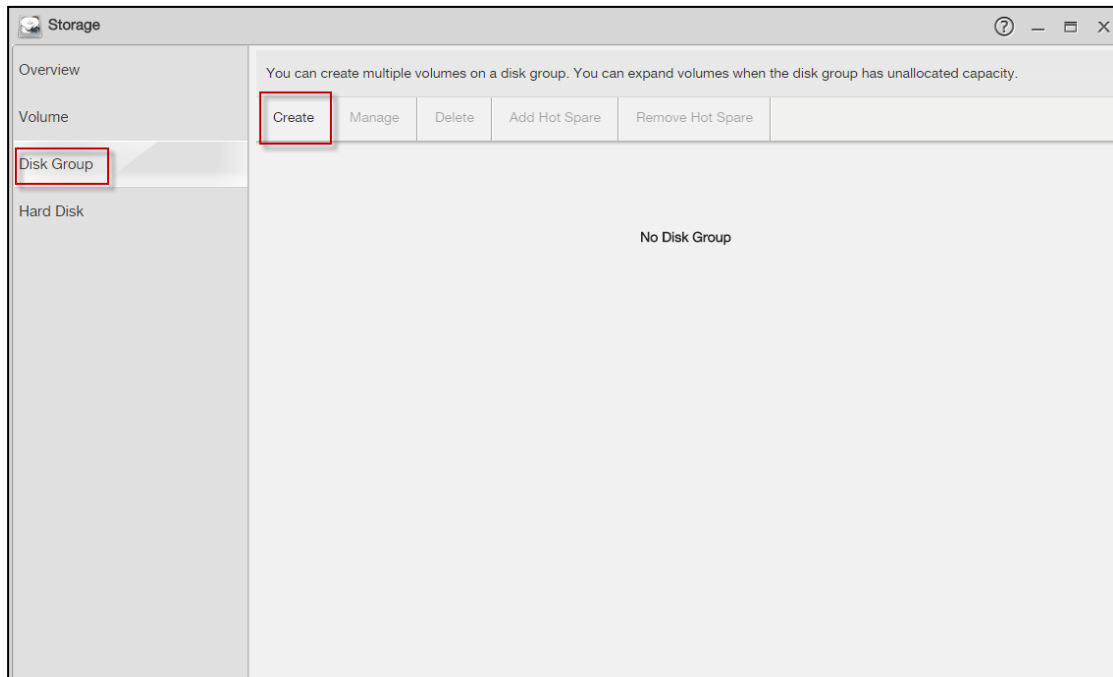
The Storage Overview screen displays the current storage configuration and volume usage.



Storage status

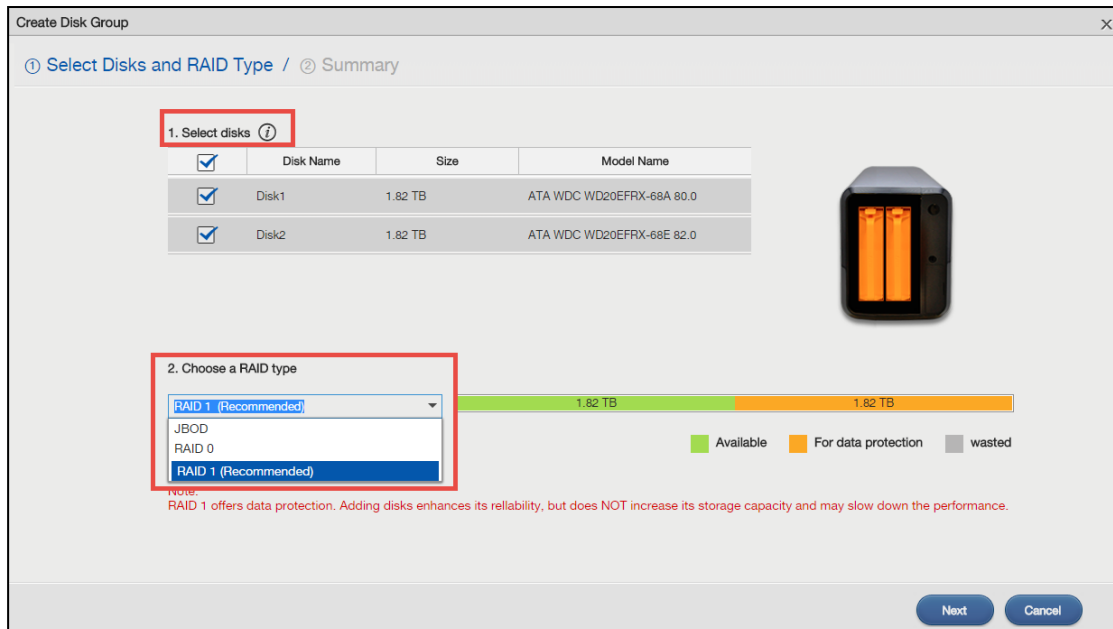
3.1.2 Create Disk Group

Click on this to format the internal hard disks and create a new disk group. All data on the disk(s) will be lost.

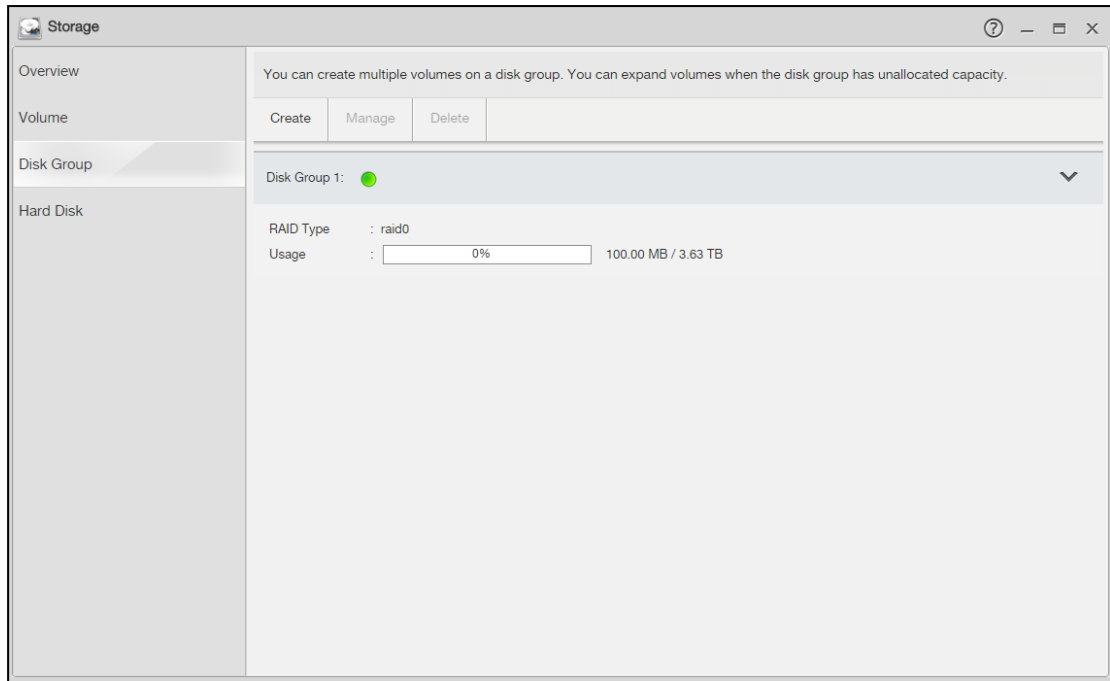


Storage->Disk Group

This lists all available hard disks in the table and displays the disk trays of the hard disks that are currently installed (according to the graphic on the right). Select a RAID type from the drop-down list.

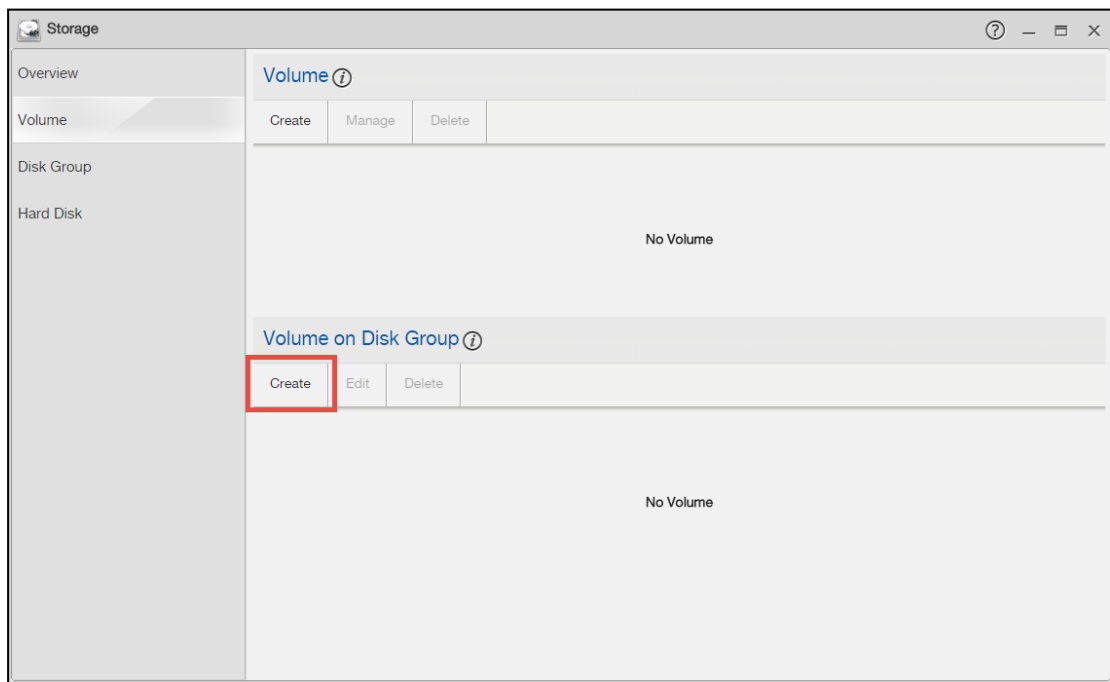


Select disks and RAID type



Disk Group create down

Create a volume in your disk group.



Volume->Create

Create Volume on Disk Group

① Create Volume / ② Summary

Create volume on disk group

Disk group information	
Name	Disk Group 1
Unallocated capacity	<div style="width: 100.00%; background-color: #28a745; height: 10px; display: inline-block;"></div> 3.63 TB / 3.63 TB

Create Volume	
Volume Name	<input type="text" value="Volume1"/>
Allocated volume size	<input type="text" value="1000"/> GB MAX

Back Next Cancel

Setting your volume size for this disk group

Create Volume on Disk Group

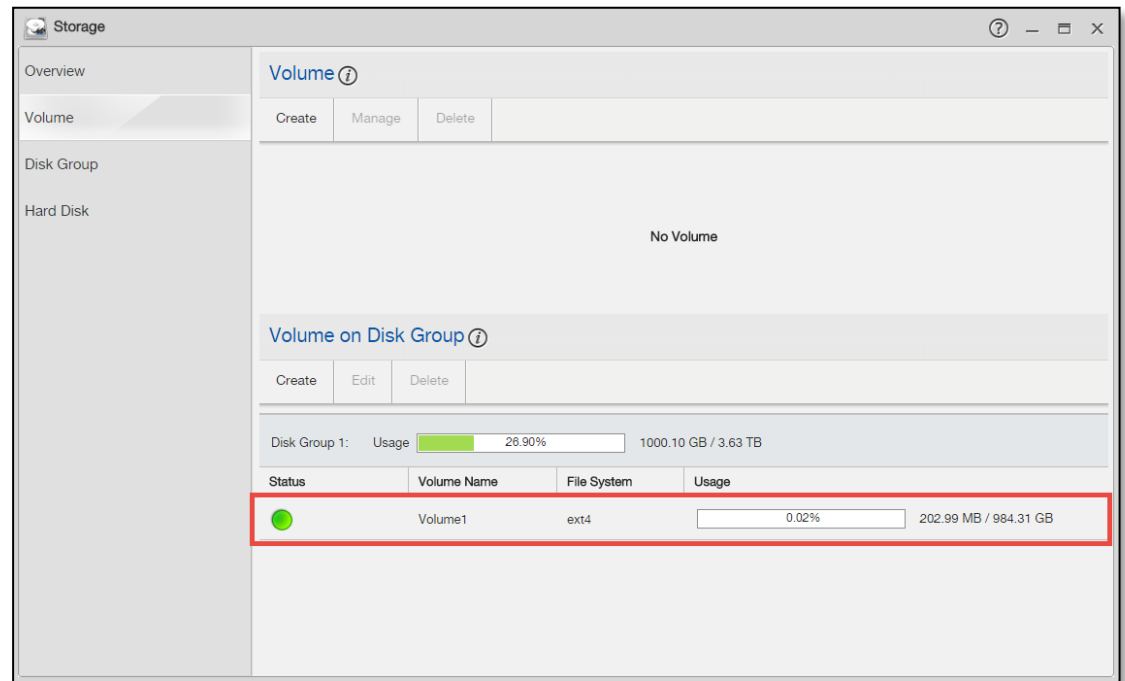
① Create Volume / ② Summary

Item	Value
Volume Type	Multiple volumes on RAID (Disk Group 1)
Volume Name	Volume1
Volume Capacity	1000 GB

Back Apply Cancel

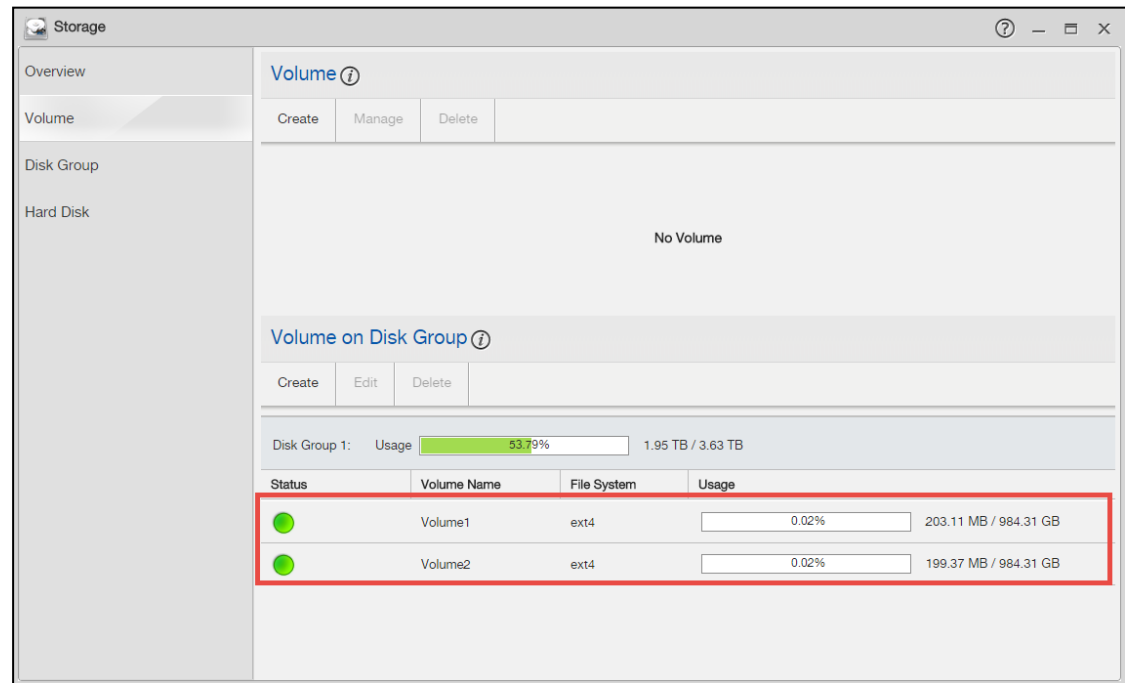
Disk Group type and volume information

This page shows the current storage usage for each volume built directly on top of a RAID.



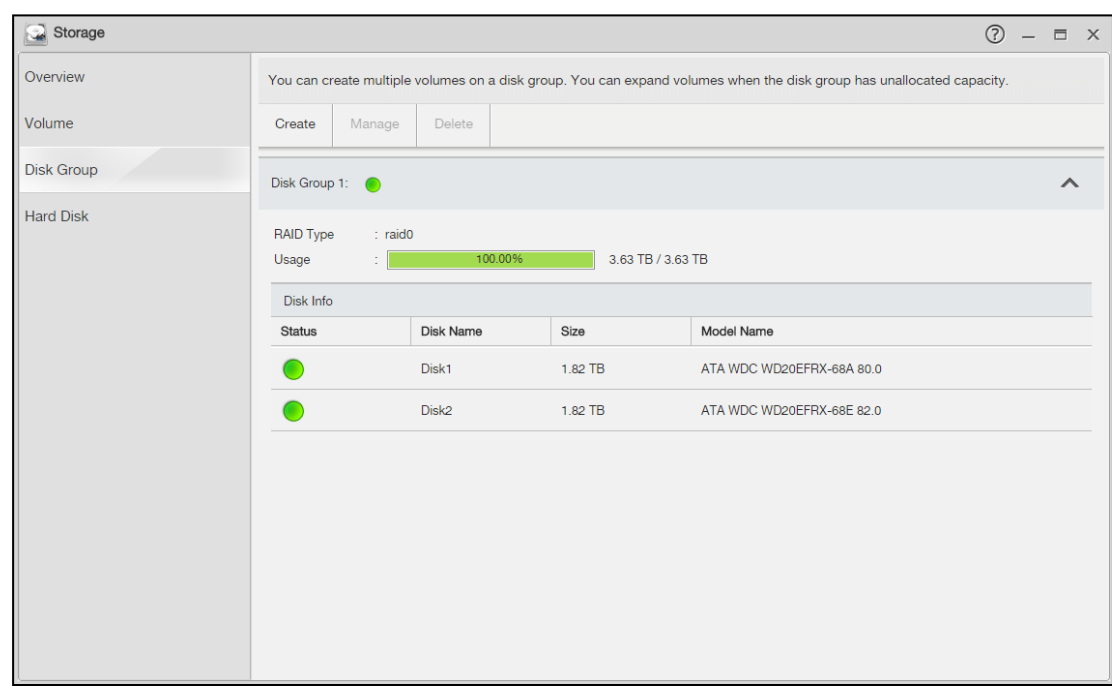
Check volume of disk group status

You can create multiple volumes on a disk group and customize the size of a volume.



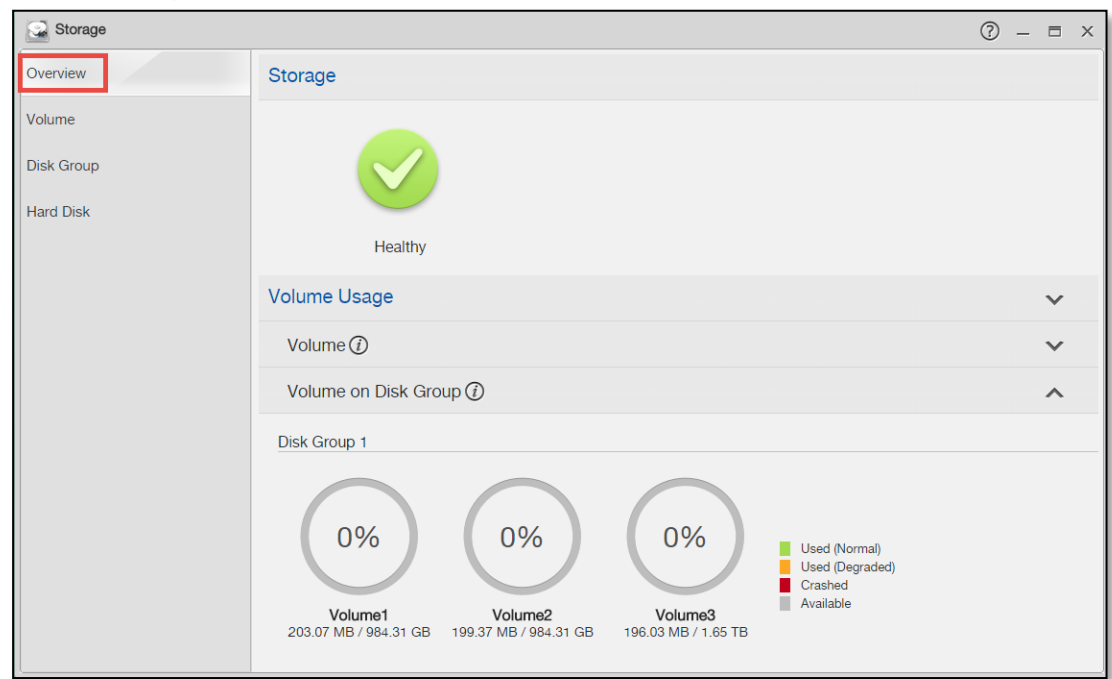
Multiple volumes on disk group

Check the disk group information.



Disk Group status

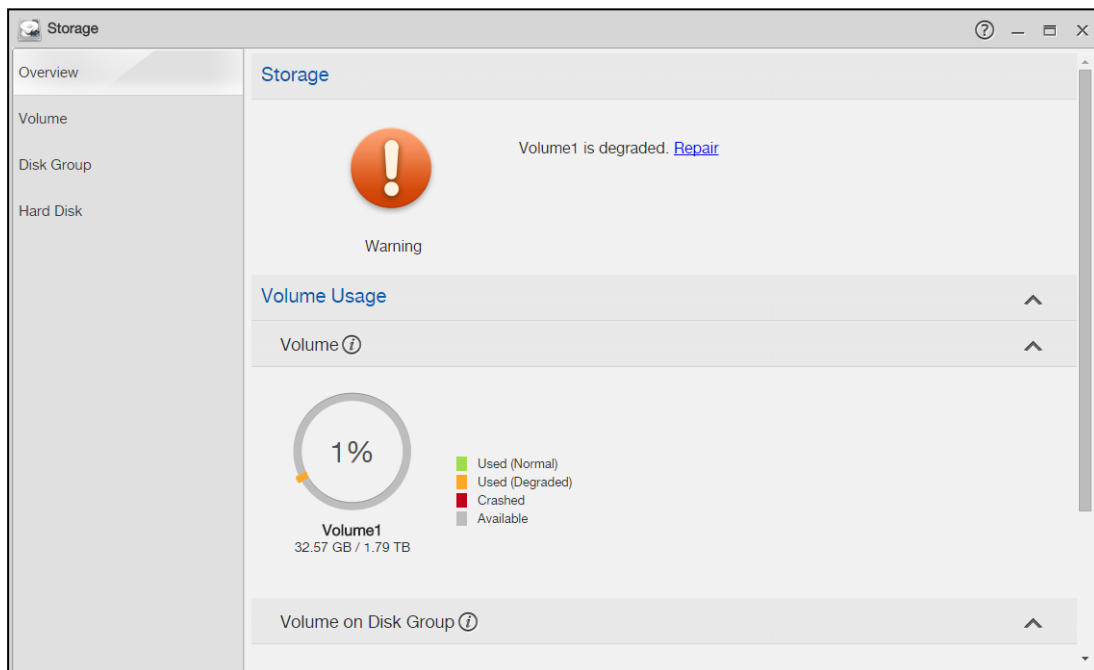
The Storage Overview screen displays the current storage configuration and volume usage.



Check storage status

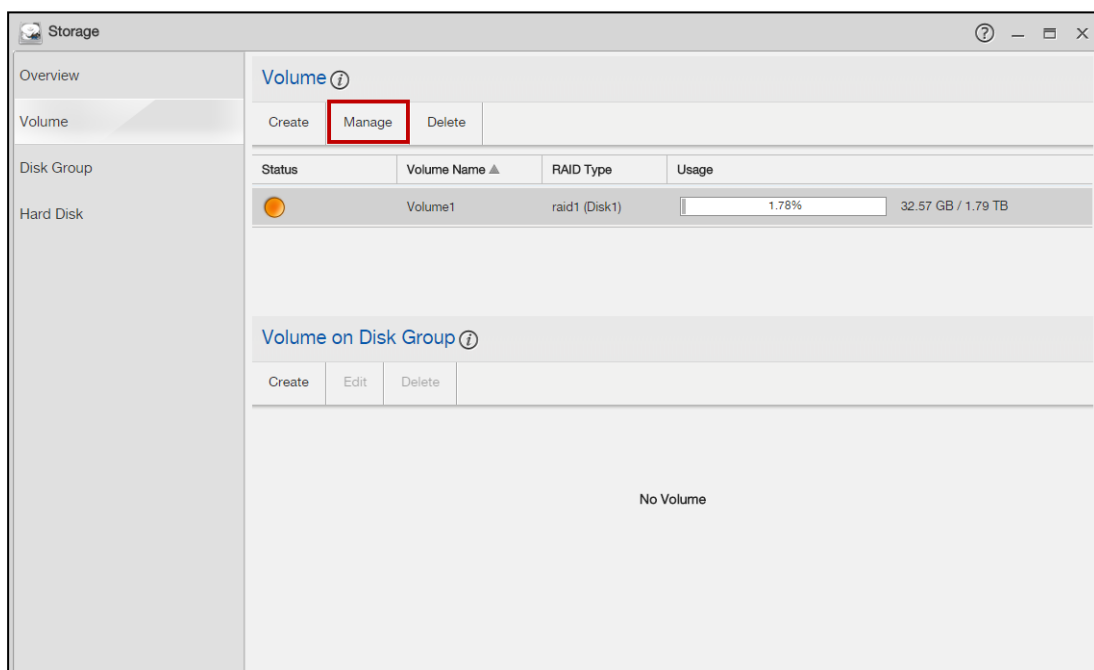
3.2 Repair volume

The Repair RAID option is available only when a degraded volume is selected.



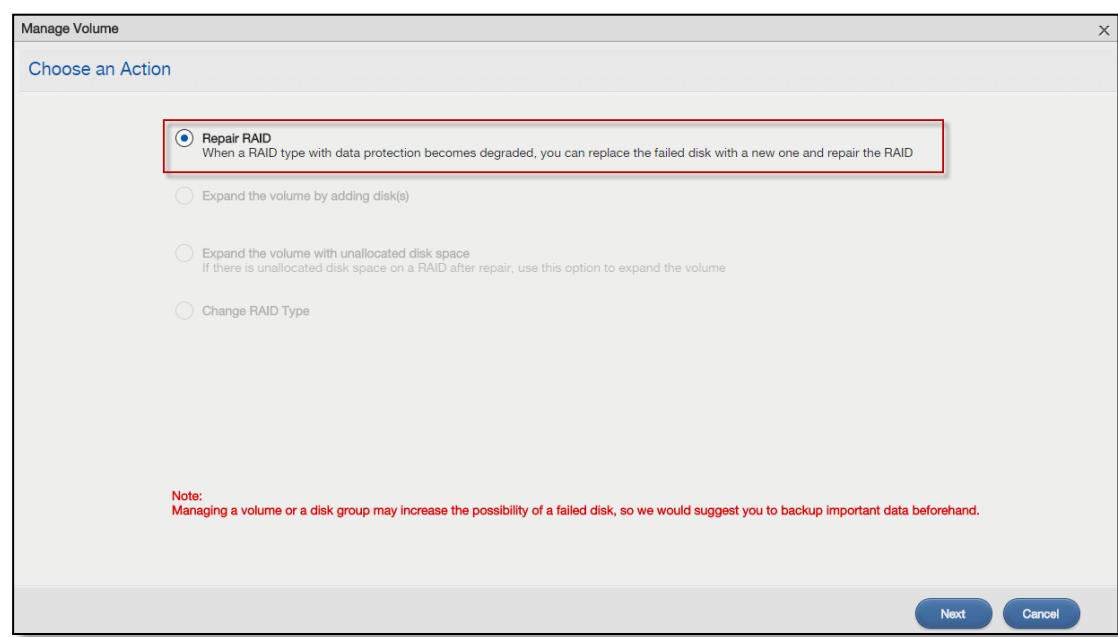
Volume degraded

Use the **Manage Volume** screen to repair, expand a volume or change the RAID type of the volume.



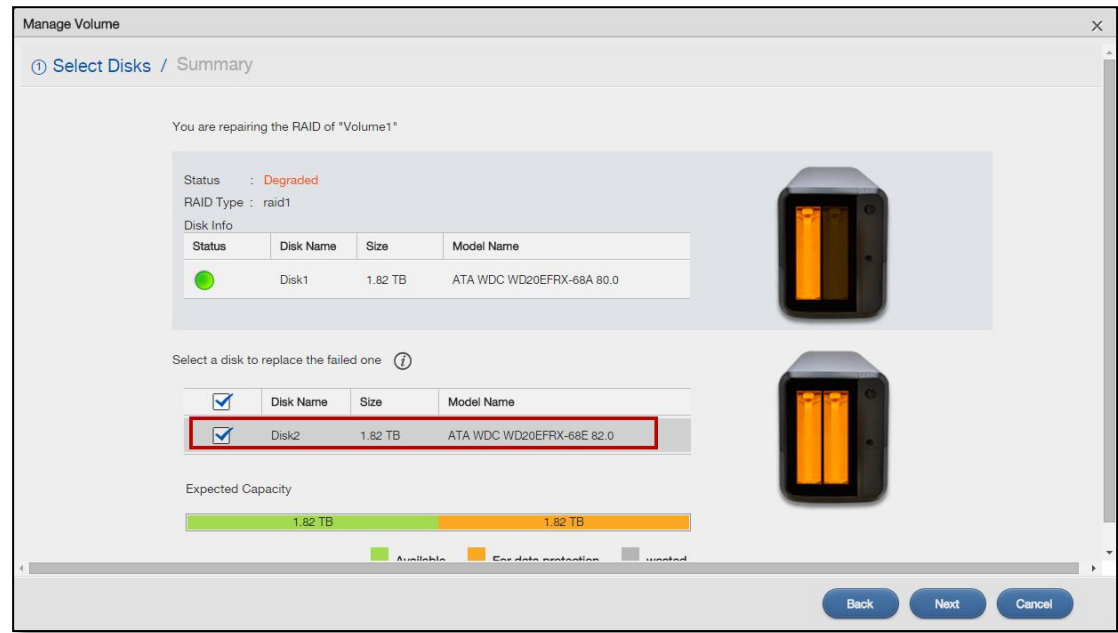
*Click **Manage***

Select **Repair RAID**.



Repair RAID

Select which disk to repair the RAID volume.



Select disk

Repair information.

Manage Volume

1 Select Disks / Summary

Item	Value
Action	Repair RAID
Volume Name	Volume1
Disk Selected	Disk2
Volume Capacity	1.82 TB

Back

Apply

Cancel

Check the information and click on **Apply**

The NAS's percentage progress in repairing the volume will be shown.

Storage

Overview

Volume

Disk Group

Hard Disk

Volume 1

CreateManageDelete

Status	Volume Name	RAID Type	Usage
<div>Repairing (Resyncing 0.1%)</div>	Volume1	raid1 (Disk1,Disk2)	<div>1.78%</div> 32.57 GB / 1.79 TB

Volume on Disk Group

CreateEditDelete

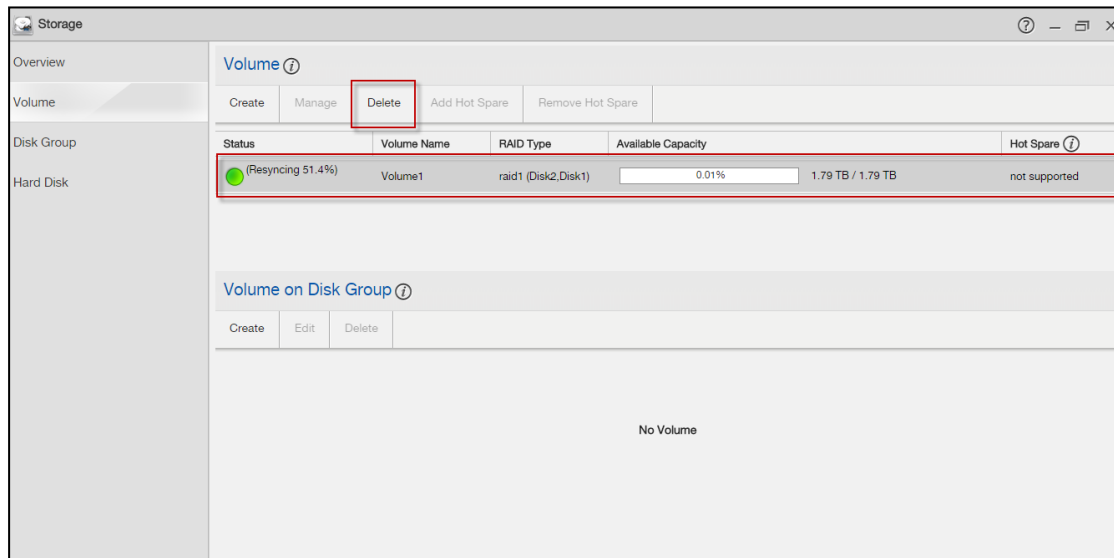
No Volume

Volume status

3.3 Delete Volume

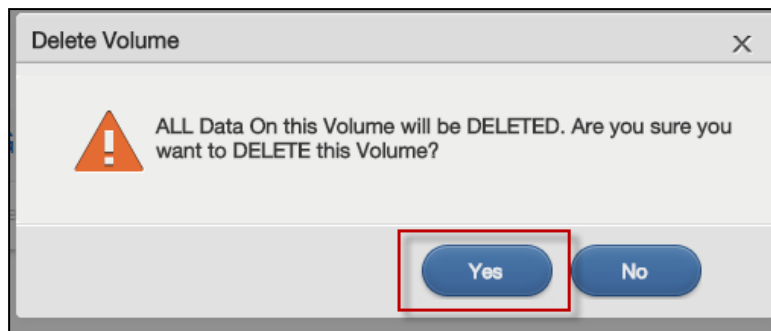
Select a volume and click **Delete** to remove it.

If you delete a volume, all data in the volume disks is erased.



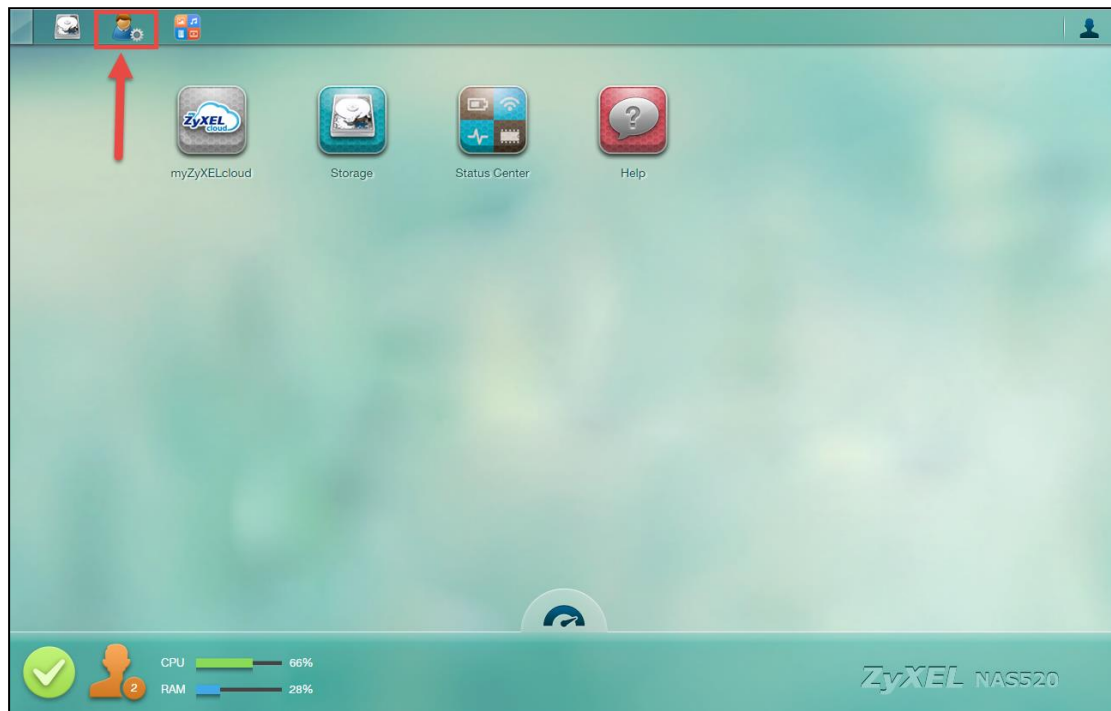
Click on **Delete**

Click on **Yes** to confirm to delete this volume.



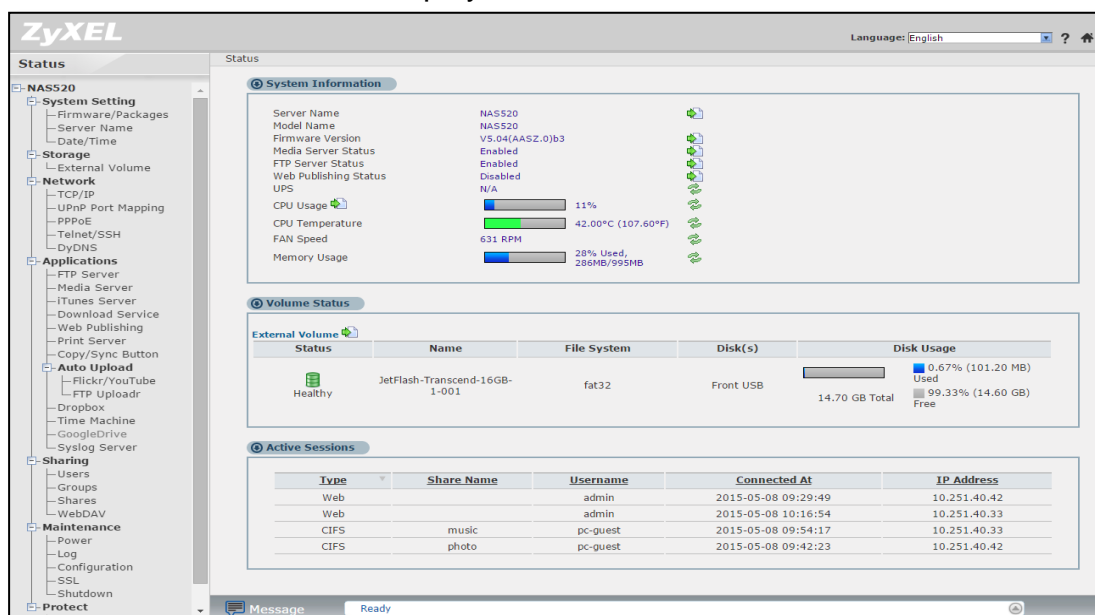
4. Administrator

The **DeskTop** screen displays an **Administrator** icon when you login with an administrator account. Click it to open the administrator configuration screens in a new tab.



DeskTop screen

The **Status** screen is the first advanced administration screen that displays. The navigation panel on the left of the **Web Configurator** screen contains screen links. Click a link to display sub-links.



Status screen

4.1 Network

Use the **TCP/IP** screen to have the NAS use a dynamic or static IP address, subnet mask, default gateway and DNS servers.

Network - TCP/IP

IP Address

Teaming Mode: Standalone

Default Gateway: LAN1

Note: The network cable for LAN2 is currently unplugged.

LAN1

Dynamic (selected)
Static

IP Address: 10.251.40.45
IP Subnet Mask: 255.255.255.0
Gateway: 10.251.40.1

IPv6 Settings

LAN2

Dynamic (selected)
Static

IP Address: 10.251.40.41
IP Subnet Mask: 255.255.255.0
Gateway: 10.251.40.1

IPv6 Settings

DNS

Dynamic
Static (selected)

Primary DNS Server: 10.251.253.254
Secondary DNS Server: 0.0.0.0

HTTP (Web Configurator)

Enable Another HTTP Web Configuration Port: ☐
Port Number:

Note: NAS will use port 8082 for media streaming.

Network Diagnostic Tool

Message Ready

Network screen

Select how to use the NAS's two Gigabit Ethernet interfaces.

Teaming Mode

- **Stand Alone:** Select this option to use a separate IP address on each of the two Gigabit Ethernet interfaces.
- **Link Aggregation:** Select this option to use IEEE 802.3ad port link aggregation to combine the two Gigabit Ethernet interfaces into a single logical link.

Network - TCP/IP

IP Address

Teaming Mode: Standalone

Default Gateway: LAN1

Note:
 The network cable for LAN1 is currently unplugged. The NAS will use LAN2 as the default gateway until LAN1 is plugged in again.

LAN1

☒ Dynamic
☐ Static

IP Address: 0.0.0.0
 IP Subnet Mask: 0.0.0.0
 Gateway:

IPv6 Settings

LAN2

☒ Dynamic
☐ Static

IP Address: 10.251.40.41
 IP Subnet Mask: 255.255.255.0
 Gateway: 10.251.40.1

IPv6 Settings

DNS

☐ Dynamic
☒ Static

Primary DNS Server: 10.251.253.254
 Secondary DNS Server: 0.0.0.0

HTTP (Web Configurator)

☐ Enable Another HTTP Web Configuration Port
 Port Number:

Note:
 NAS will use port 8082 for media streaming.

Network Diagnostic Tool

Host: Ping...

Apply Reset

Select Teaming mode for NAS

Select the LAN interface to use as the default gateway.

Network - TCP/IP

IP Address

Teaming Mode: Standalone

Default Gateway: LAN1

Note:
 The network cable for LAN1 is currently unplugged. The NAS will use LAN2 as the default gateway until LAN1 is plugged in again.

LAN1

☒ Dynamic
☐ Static

IP Address: 0.0.0.0
 IP Subnet Mask: 0.0.0.0
 Gateway:

IPv6 Settings

LAN2

☒ Dynamic
☐ Static

IP Address: 10.251.40.41
 IP Subnet Mask: 255.255.255.0
 Gateway: 10.251.40.1

IPv6 Settings

DNS

☐ Dynamic
☒ Static

Primary DNS Server: 10.251.253.254
 Secondary DNS Server: 0.0.0.0

HTTP (Web Configurator)

☐ Enable Another HTTP Web Configuration Port
 Port Number:

Note:
 NAS will use port 8082 for media streaming.

Network Diagnostic Tool

Host: Ping...

Apply Reset

Select default gateway

The NAS supports IPv6 (Internet Protocol version 6), designed to increase IP address space and enhance features. You can click **Network > TCP/IP** for further configuration.

Network - TCP/IP

IP Address

Teaming Mode: Standalone

Default Gateway: LAN1

Note:
 The network cable for LAN1 is currently unplugged. The NAS will use LAN2 as the default gateway until LAN1 is plugged in again.

LAN1

Dynamic (selected)
 Static

IP Address: 0.0.0.0
 IP Subnet Mask: 0.0.0.0
 Gateway:

IPv6 Settings

LAN2

Dynamic (selected)
 Static

IP Address: 10.251.40.41
 IP Subnet Mask: 255.255.255.0
 Gateway: 10.251.40.1

IPv6 Settings

DNS

Dynamic
 Static (selected)

Primary DNS Server: 10.251.253.254
 Secondary DNS Server: 0.0.0.0

HTTP (Web Configurator)

Enable Another HTTP Web Configuration Port: ☐
 Port Number:

Note:
 NAS will use port 8082 for media streaming.

Network Diagnostic Tool

Host: Ping...

Apply Reset

Click on IPv6 Settings

Click on this to configure the following IPv6 settings.

Mode -

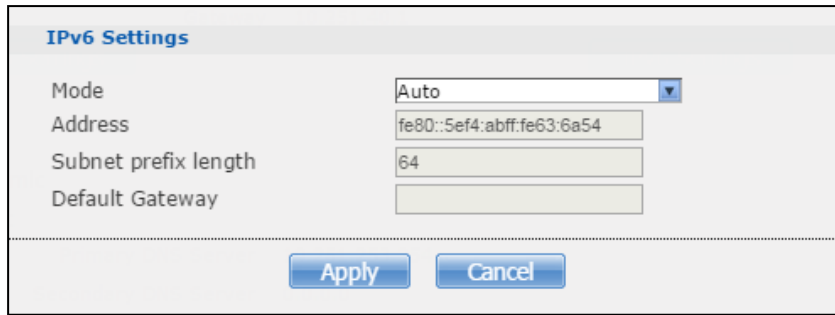
- Select **Auto** to have the Device use the IPv6 prefix from the connected router's Router Advertisement (RA) to generate an IPv6 address.
- Select **Static** if you have a fixed IPv6 address assigned by your ISP.
- Select **Disable** to not assign any IPv6 address for the NAS.

IPv6 Settings

Mode: Disable (selected)
 Address: Disable
 Subnet prefix length: Auto
 Default Gateway: Static

Apply Cancel

Select Disable / Auto / Static



IPv6 Settings

Mode: Auto

Address: fe80::5ef4:abff:fe63:6a54

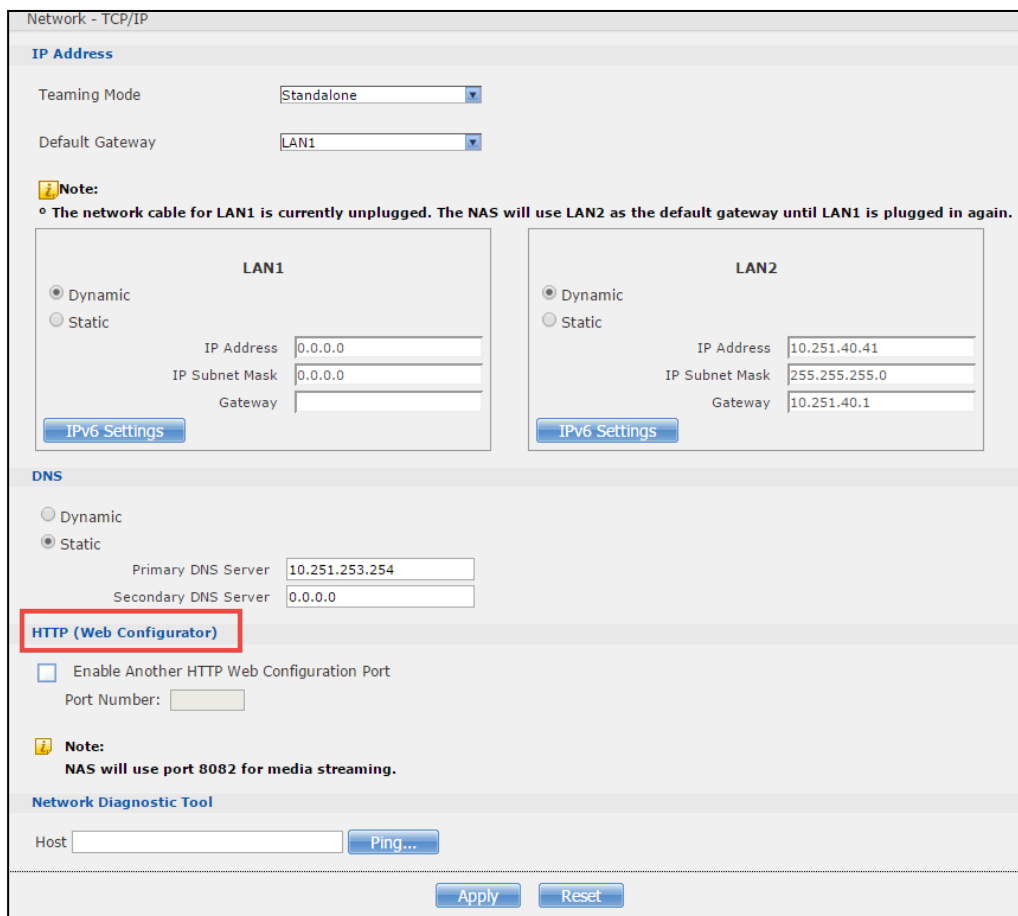
Subnet prefix length: 64

Default Gateway:

Apply Cancel

*Auto will get **IPv6 IP address** automatically*

Select HTTP to configure an additional HTTP port for accessing the web. .



Network - TCP/IP

IP Address

Teaming Mode: Standalone

Default Gateway: LAN1

Note:
 The network cable for LAN1 is currently unplugged. The NAS will use LAN2 as the default gateway until LAN1 is plugged in again.

LAN1

Dynamic ☒ Static ☐

IP Address: 0.0.0.0

IP Subnet Mask: 0.0.0.0

Gateway:

IPv6 Settings

LAN2

Dynamic ☒ Static ☐

IP Address: 10.251.40.41

IP Subnet Mask: 255.255.255.0

Gateway: 10.251.40.1

IPv6 Settings

DNS

Dynamic ☐ Static ☒

Primary DNS Server: 10.251.253.254

Secondary DNS Server: 0.0.0.0

HTTP (Web Configurator)

☐ Enable Another HTTP Web Configuration Port

Port Number:

Note:
 NAS will use port 8082 for media streaming.

Network Diagnostic Tool

Host: Ping...

Apply Reset

*Configure and specify a number in the **Port Number** field*

4.2 Auto-upload Service

ZyXEL NAS allows users to automatically upload their pictures to the Flickr website (<http://www.Flickr.com>) and video files to the YouTube website (<http://www.youtube.com>). Additionally, automatic FTP uploading is supported in the NAS. To use this feature, you need to download the same package as the NAS210's.

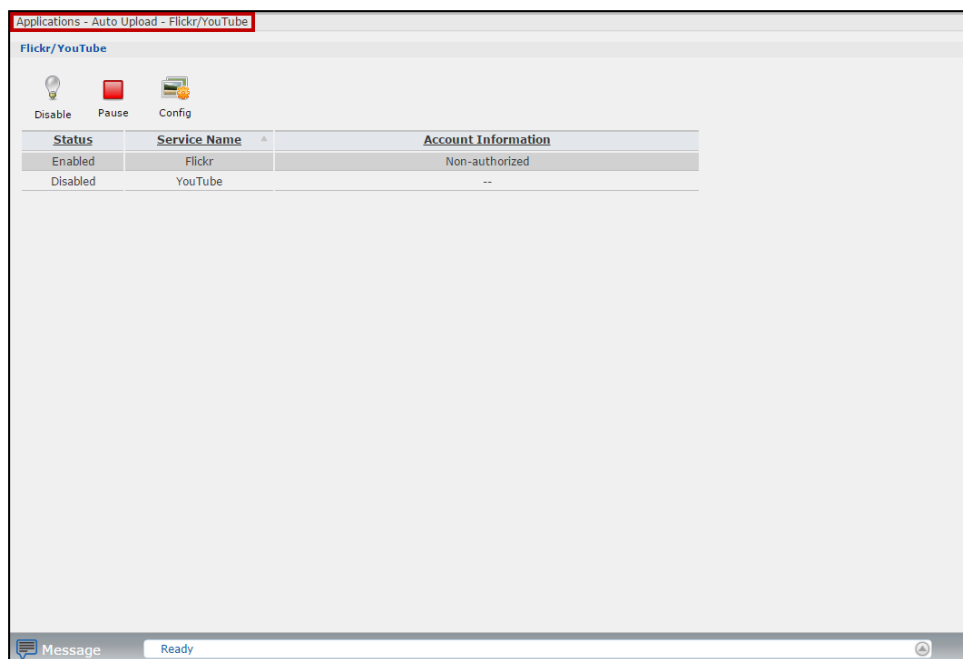
Auto-upload Pictures to Flickr

To share pictures on the Flickr website (http://www.Flickr.com), the NAS supports automatic uploading of pictures from a given folder of the NAS.

Configuration Procedure:

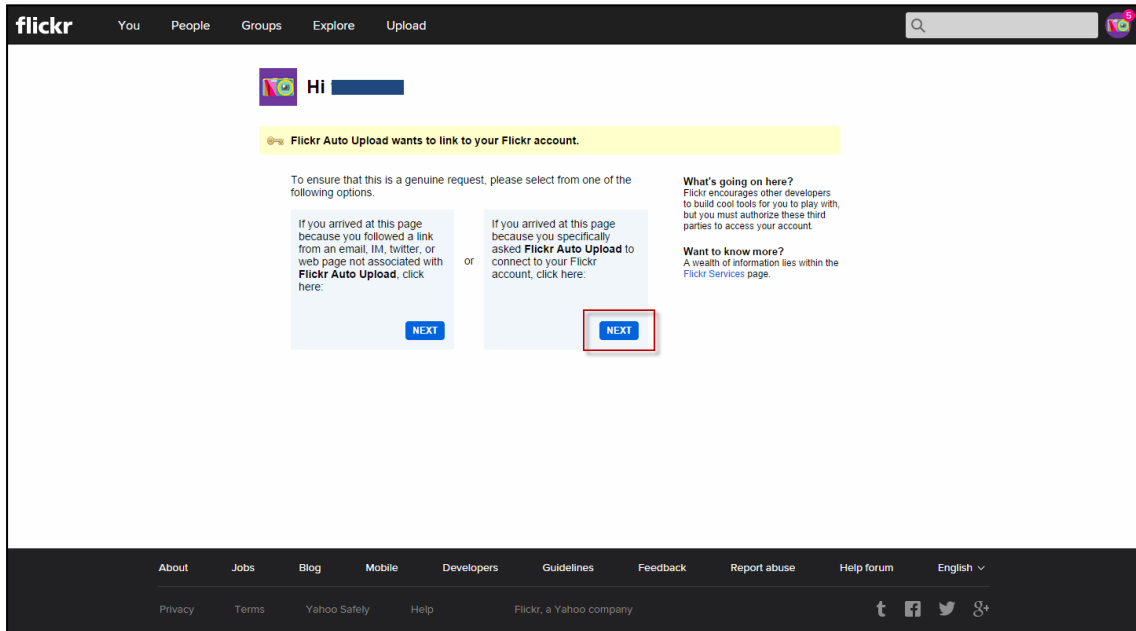
- Enable auto-upload in Flickr service.
- Configure the account Flickr account information.
- Link your NAS with your Flickr account.
- Specify the folders, which you want NAS to automatically, upload your pictures.
- Specify the grace period and other options in the auto-upload function.
- Move pictures to the folders you specified in the previous step.
- Check the result in the Flickr website.
- Check the system log in the NAS.

First, login to the web GUI page in NAS, go to **Applications > Auto Upload > Flickr/YouTube**. Then, enable **Flickr service** as shown below. After enabling the Flickr service, you will see two more icons on the same page.



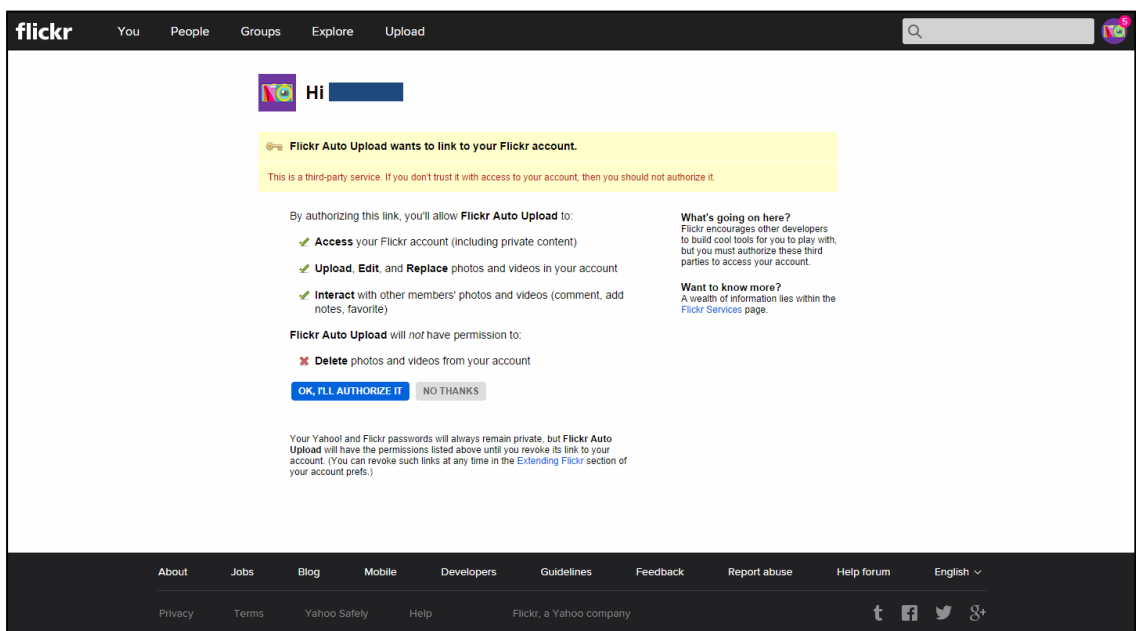
Enable Flickr service.

Click on the **config** icon to set a more detailed configuration. There will be several system notifications to warn you that you are going to link to the Flickr website. Meanwhile, please ensure that you have the Flickr account information. After configuring the account information, the system will inform you about the connection to Flickr. In the following pop-up browser window, you need to authorize the connection between your account and your NAS.

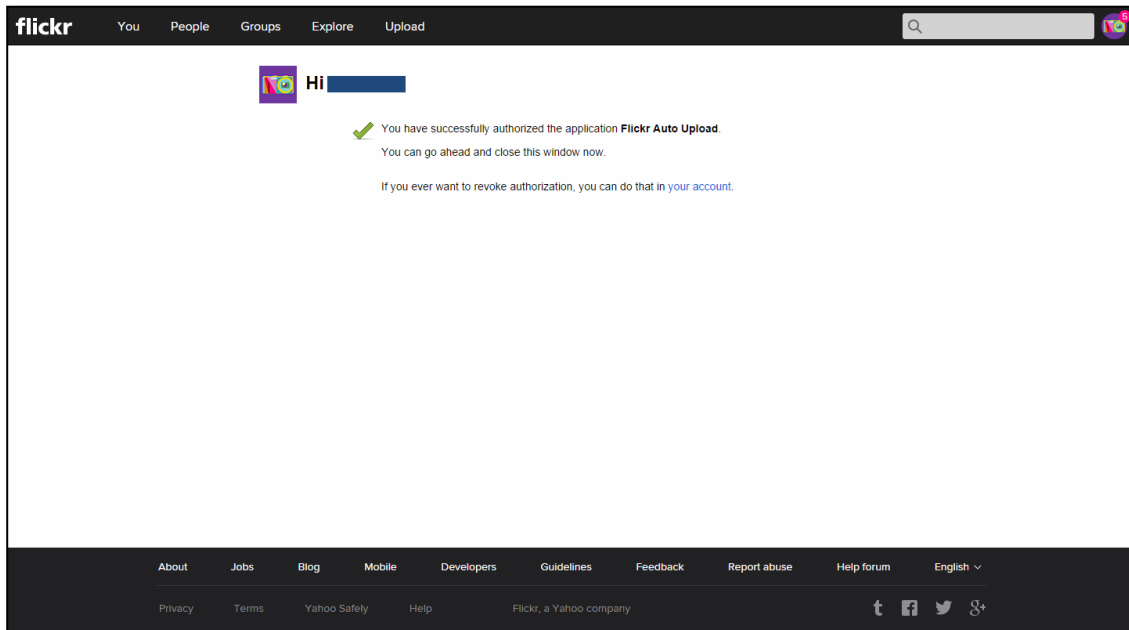


Authorization between your account and NAS

The following figure shows that you can agree to this link after clicking on the **OK** button.

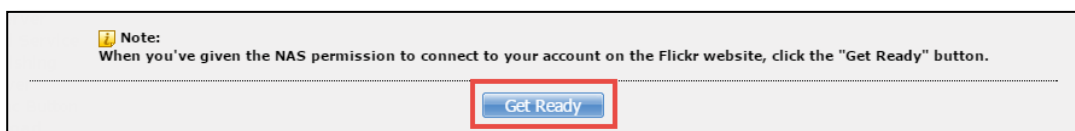


Authorization screen



Successful authorization

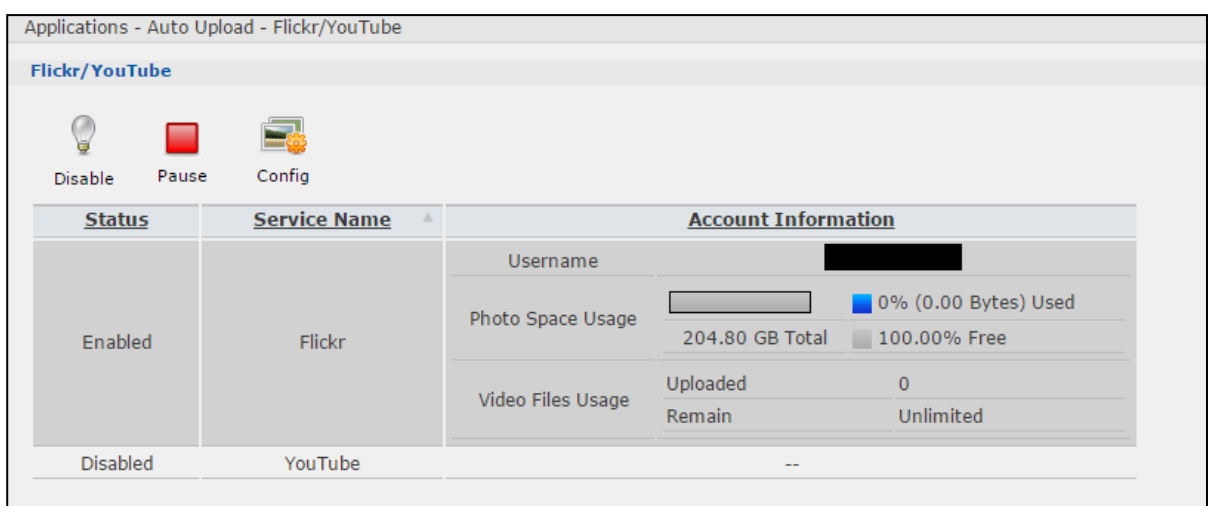
After allowing the agreement in the Flickr page, please also click on the **Get ready** button in the NAS.



Click on "Get Ready".

You can check the service status in the NAS under **Applications > Auto Upload > Flickr/YouTube**.

In this case, we can see the storage status in your Flickr account.



Monitor the service status

Afterwards, users need to set which folder(s) of the NAS will be monitored and uploaded to the Flickr website. In this example, we are going to set the folder named as “photo1” under the public folder to be monitored and upload all the pictures to the Flickr website.

The screenshot shows the 'Applications - Auto Upload - Flickr/YouTube' window. The 'Flickr Account Configuration' section includes fields for Username, Photo Space Usage (0% (0.00 Bytes) Used, 204.80 GB Total, 100.00% Free), and Video Files Usage (Uploaded: 0, Remain: Unlimited). A 'Switch User' button is present. The 'Folder Selection' section has a 'Folder Watch List' table with columns: Status, Share Name, Path, and Action. Below the table, it states 'There are currently no folders on the watch list.' and an 'Add' button. A note specifies supported file formats: bmp, gif, jpeg, jpg, png, tif, tiff, 3gp, 3g2, avi, mov, mpeg, mpg, wmv, mp4. The 'Grace Period' section shows a time of 15 minutes. The 'Default Privacy' section has radio buttons for 'Only You', 'Your friends', 'Your family', and 'Anyone', and a checked checkbox for 'Hide from public site area?'. A 'Switch User' button is also visible.

Configure **Grace Period** in the GUI

In this example, we have configured the grace period as two minutes. This means that the NAS will upload any newly added pictures from the folder that you specified after 15 minutes from when you clicked on the **Apply** button.

The screenshot shows the 'Applications - Auto Upload - Flickr/YouTube' window. The 'Grace Period' section shows a time of 15 minutes. The 'Default Privacy' section has radio buttons for 'Only You', 'Your friends', 'Your family', and 'Anyone', and a checked checkbox for 'Hide from public site area?'. The 'Default Safety Level' section has radio buttons for 'Safe', 'Moderate', and 'Restricted'. A note specifies that video on Flickr may only include 'Safe' or 'Moderate' content, and 'Restricted' video content is not allowed. The 'Default Content Type' section has radio buttons for 'Photos / Videos', 'Screenshots / Screencasts', and 'Illustration / Art / Animation / CGI'. At the bottom, there are 'Apply' and 'Reset' buttons. A message bar at the very bottom shows 'Message' and 'Ready'.

Configure **Grace Period** in the GUI

Please specify the given folder that the NAS will monitor and upload the pictures after applying the configuration.

Applications - Auto Upload - Flickr/YouTube

Flickr Account Configuration

Username: tiramisu1025

Photo Space Usage: 0% (0.00 Bytes) Used / 204.80 GB Total / 100.00% Free

Video Files Usage: Uploaded: 0 / Remain: Unlimited

[Switch User](#)

Folder Selection

Folder Watch List

Status	Share Name	Path	Action
There are currently no folders on the watch list.			

[Add](#)

Note:
Only the following file formats will be automatically uploaded: bmp, gif, jpeg, jpg, png, tif, tiff, 3gp, 3g2, avi, mov, mpeg, mpg, wmv, mp4

Specify the folder

Add Watch Folder

Share: Auto_Upload

Path: [Browse ...](#)

[Apply](#) [Cancel](#)

Select share and path

Browse ...

Current Location: /

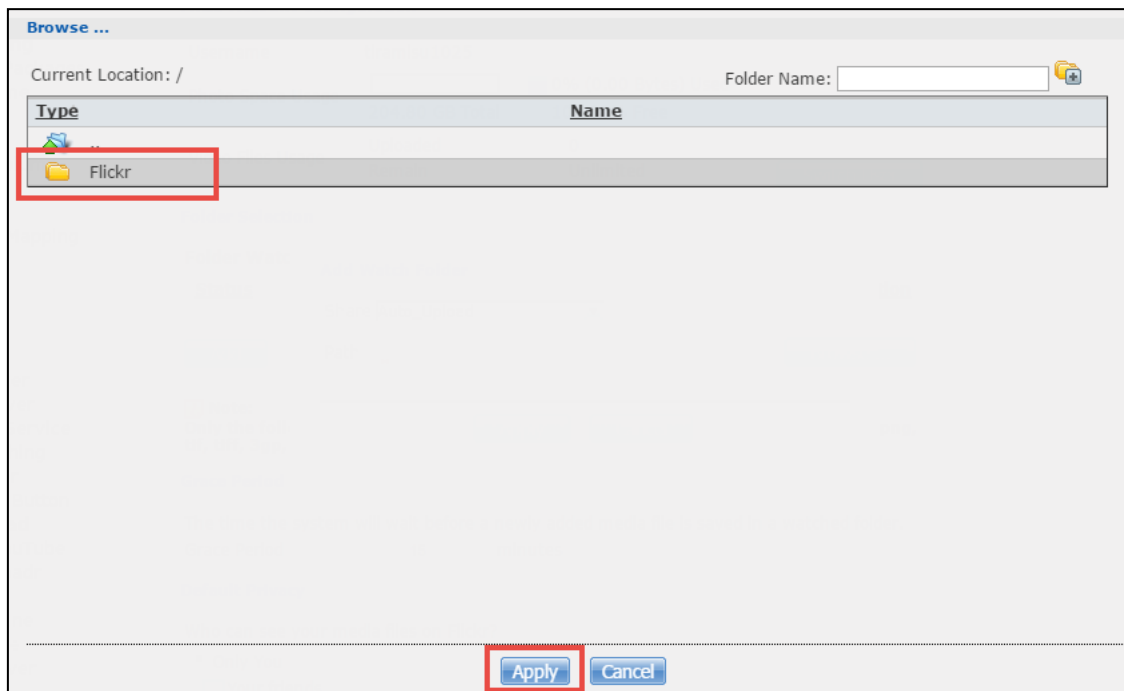
Folder Name: Flickr

Type	Name
..	..

[Apply](#) [Cancel](#)

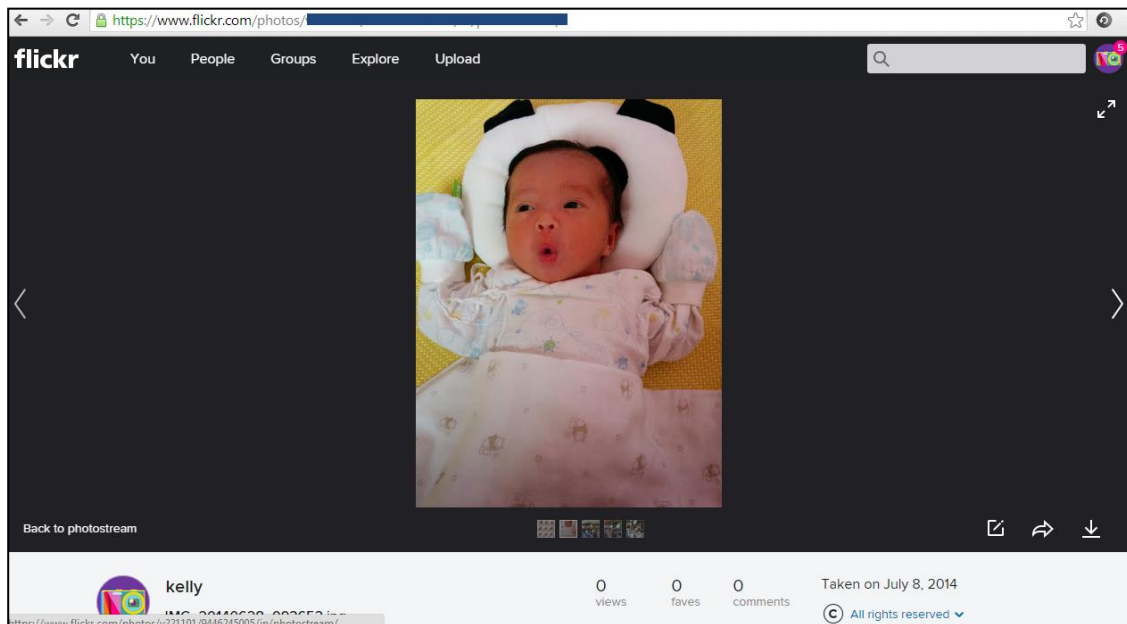
Or create folder in Browse page

Please remember to click on the Apply button after specifying the given folder. The NAS will monitor any need added pictures in the folder you assigned after you have clicked on the Apply button.



Click on "Apply" after specifying the folder

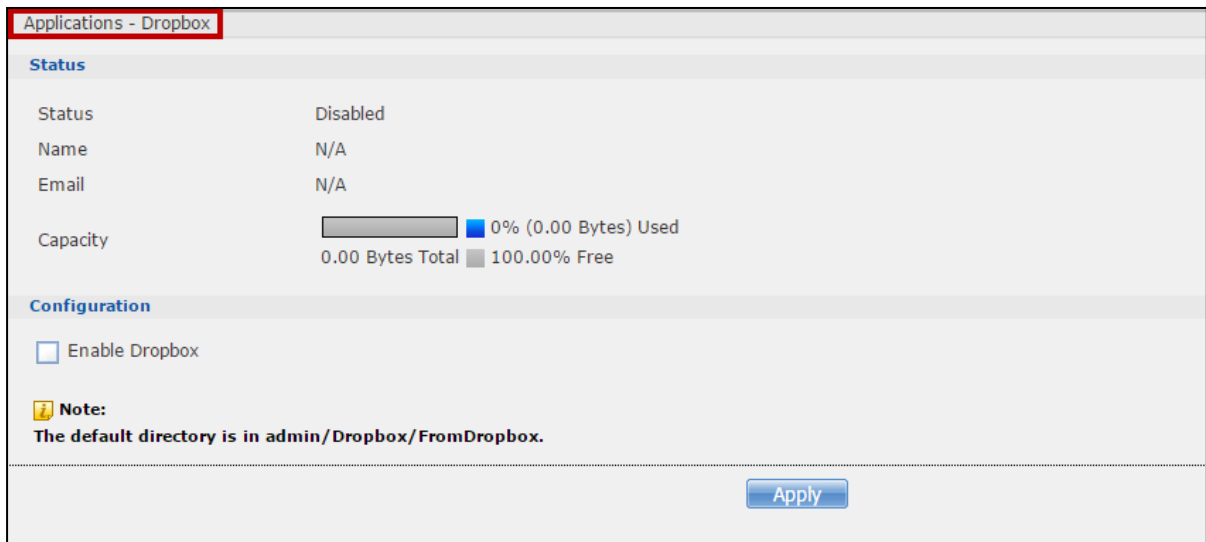
After 15 minutes, the NAS will upload the newly added photos to the Flickr website. In this example, we can see that one picture has been uploaded to the website.



Uploaded photo

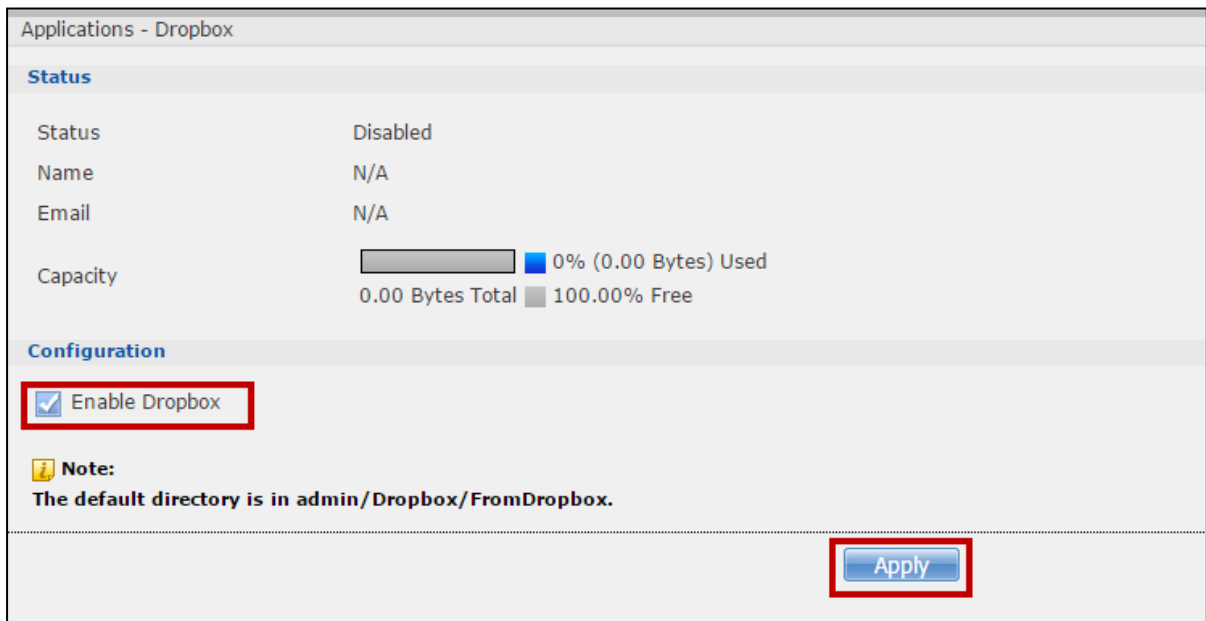
4.3 Dropbox

Dropbox provides a files backup service. You create an account for Dropbox (<https://www.dropbox.com>), Dropbox will give you 2 GB of storage for your files backup. The NAS will automatically download the files from the Dropbox server.



The screenshot shows the 'Applications - Dropbox' configuration page. The 'Status' section displays 'Status: Disabled', 'Name: N/A', 'Email: N/A', and a capacity bar showing '0% (0.00 Bytes) Used' out of '0.00 Bytes Total' and '100.00% Free'. The 'Configuration' section has an unchecked checkbox for 'Enable Dropbox'. A note states: 'The default directory is in admin/Dropbox/FromDropbox.' An 'Apply' button is at the bottom right.

Go to **Applications > Dropbox**. Then, enable the Dropbox service.



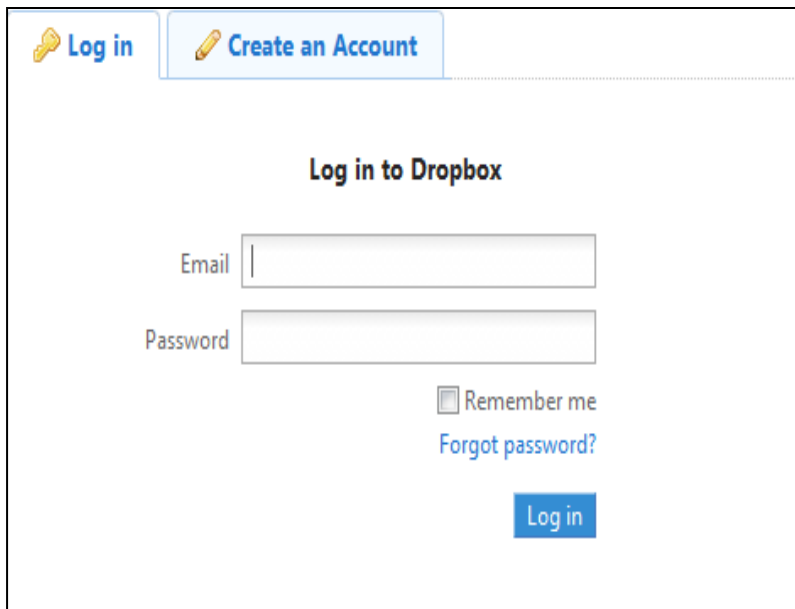
This screenshot shows the same 'Applications - Dropbox' configuration page, but the 'Enable Dropbox' checkbox in the 'Configuration' section is now checked and highlighted with a red box. The 'Apply' button at the bottom right is also highlighted with a red box. All other elements, including the status and capacity information, remain the same.

Dropbox screen

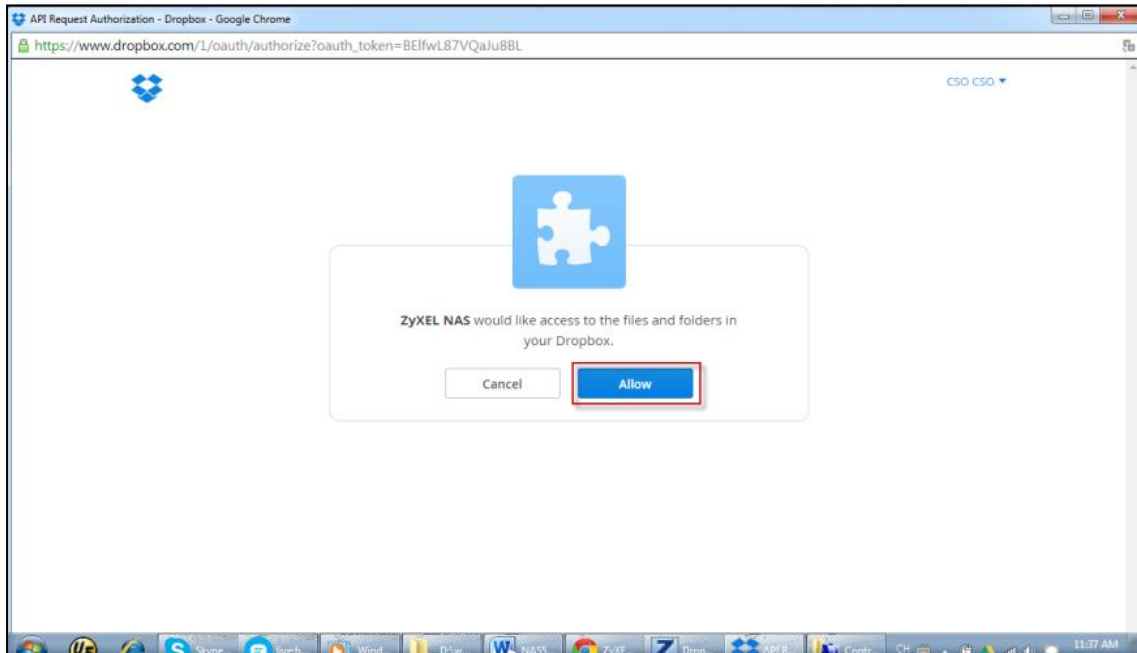
After you enable the Dropbox service, the browser is going to link to the Dropbox website. Meanwhile, please make sure that you have the Dropbox account information.

After configuring the account information, the system will notify you about the connection to Dropbox.

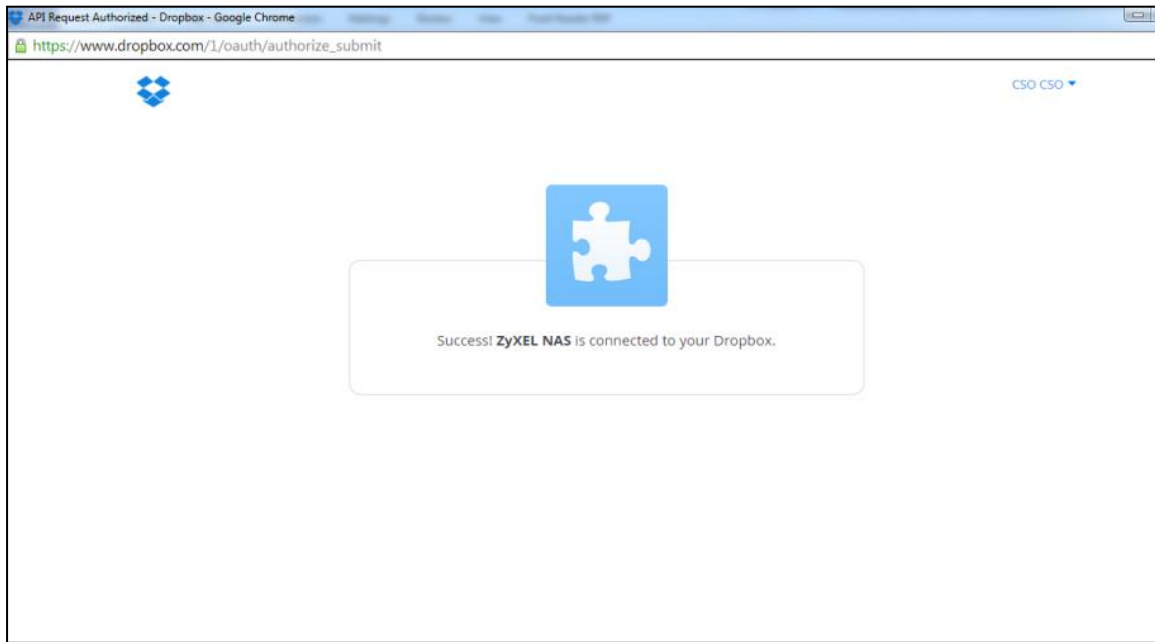
In the following popup browser, you need to authorize the connection between your account and your NAS.

A screenshot of the Dropbox login page. At the top, there are two buttons: "Log in" with a key icon and "Create an Account" with a pencil icon. Below these, the heading "Log in to Dropbox" is centered. Under the heading, there are two input fields: "Email" and "Password". To the right of the "Password" field, there is a checkbox labeled "Remember me" and a link "Forgot password?". At the bottom right, there is a blue "Log in" button.

Login to Dropbox.

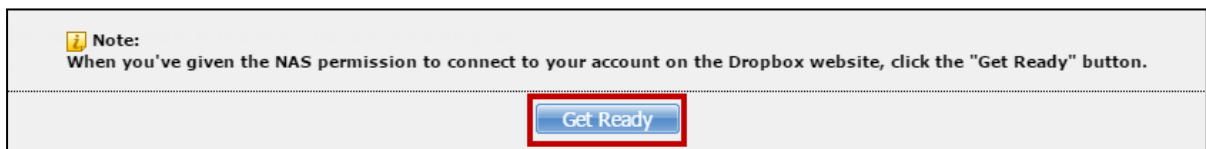


Authorization between your account and NAS.



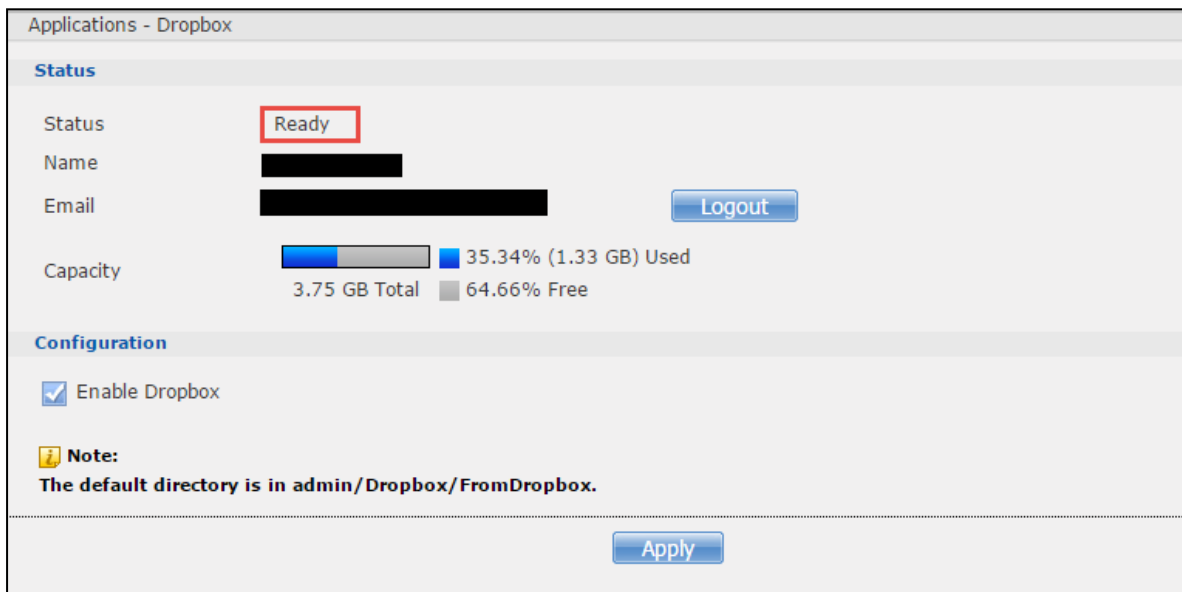
Success! ZyXEL NAS is connected to your Dropbox.

After allowing the agreement in the Dropbox page, please also click on the **Get ready** button in the NAS.



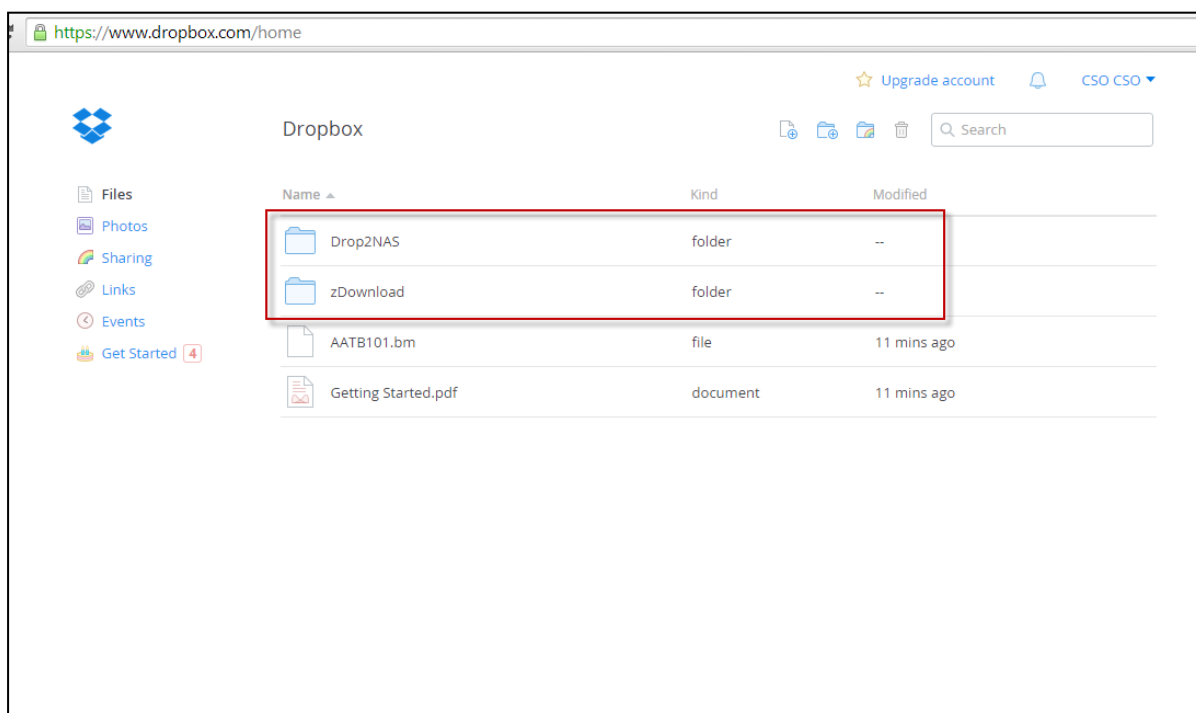
Click on Get Ready.

You can check the service status in the NAS under **Applications > Dropbox**. In this case, we can see the storage status in your Dropbox account.



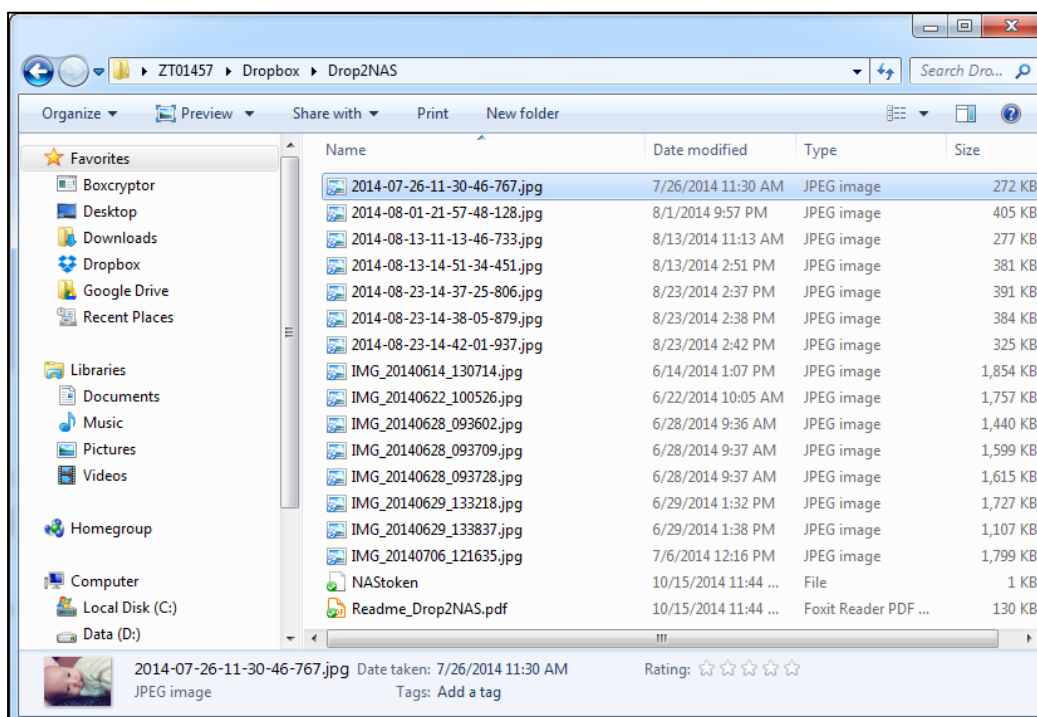
Monitor the service status

This creates Drop2NAS and zDownload folders in your Dropbox account. The NAS checks the Dropbox account's Drop2NAS and zDownload folders every three minutes.

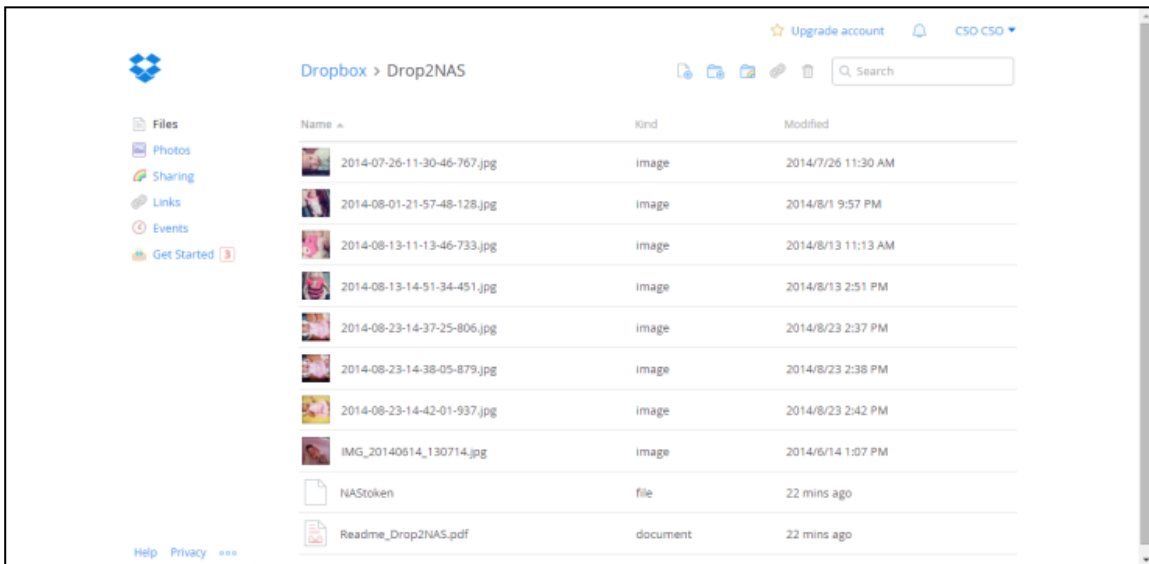


The NAS connects to Dropbox and copies files in the Drop2NAS folder to the NAS's admin\Dropbox\FromDropbox folder, and then empties the Drop2NAS folder. The NAS initiates connections to the Dropbox server so you do not need to configure rules on a firewall in front of the NAS to allow access to the NAS. When your PC has installed Dropbox, you can upload files to the Drop2NAS folder, and then NAS will get files from the Dropbox server.

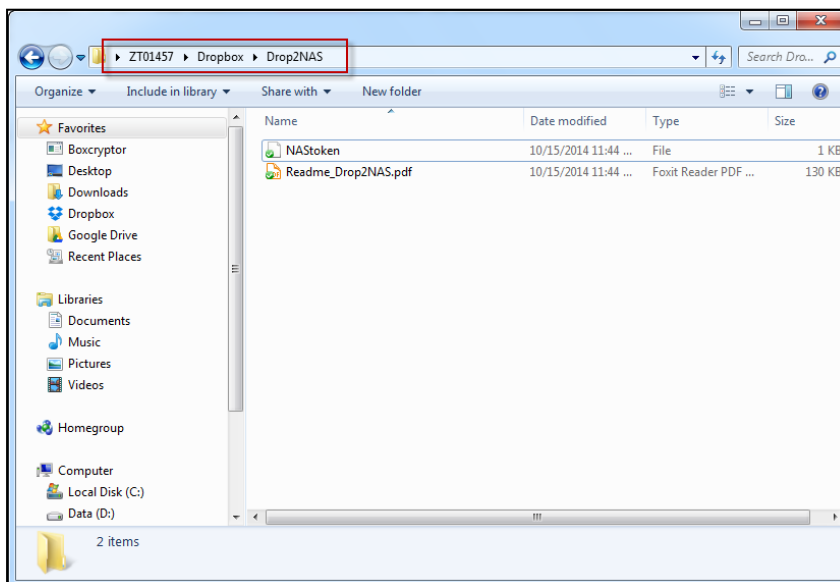
Note: Do not delete the NAS token file, as it is needed for your NAS to work with the Dropbox account.



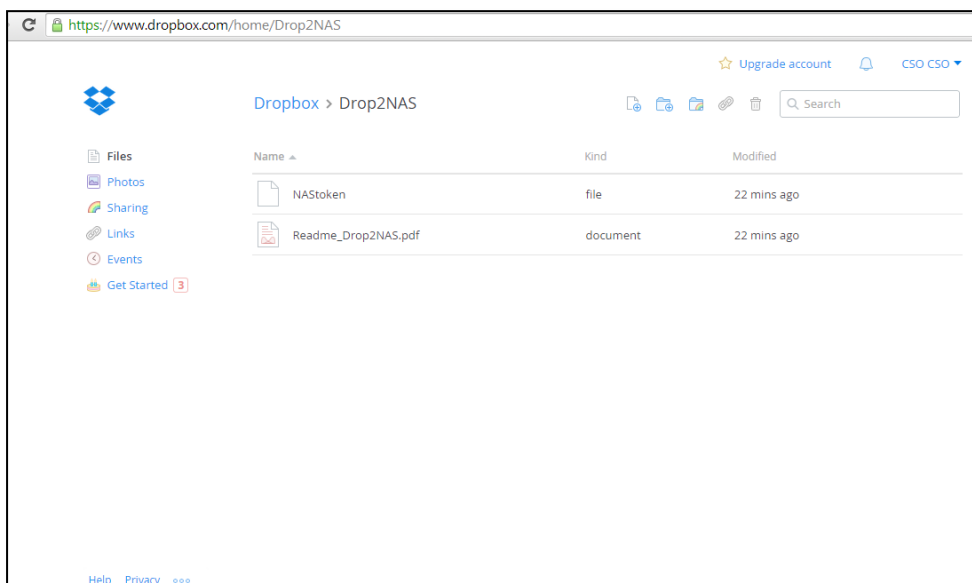
Upload files to folder.



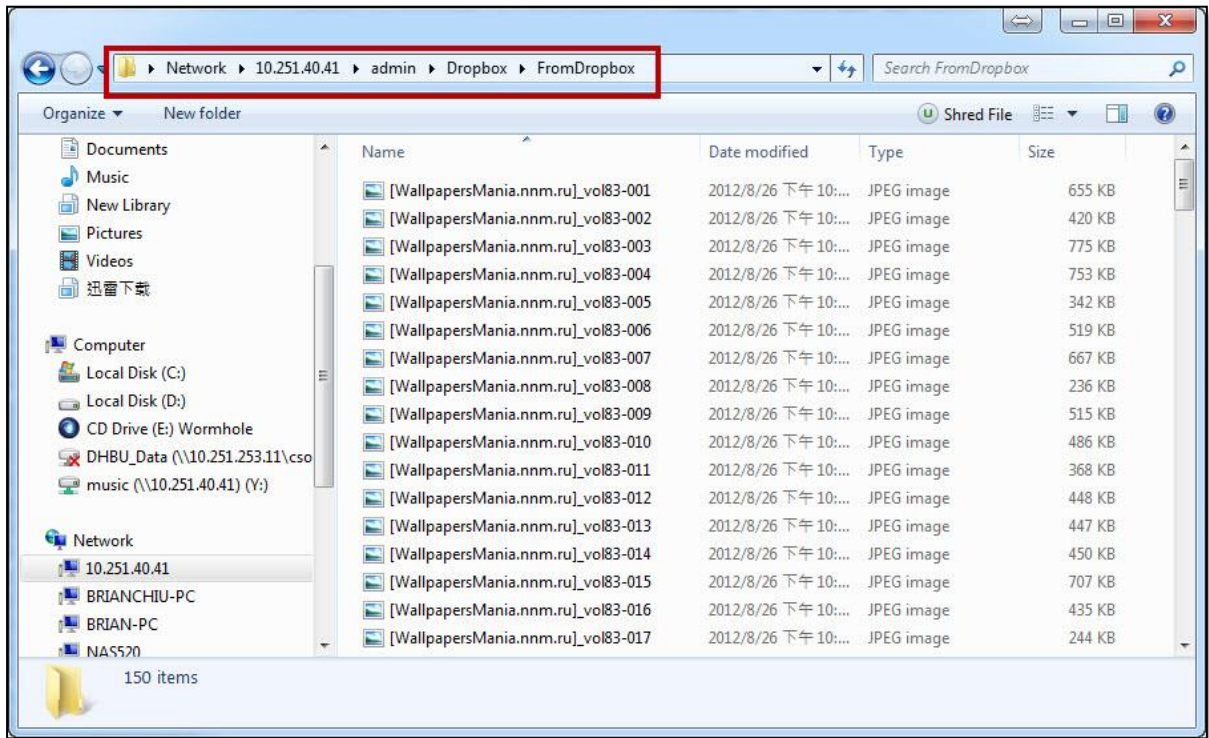
Check files from website



NAS auto move files from Dropbox server



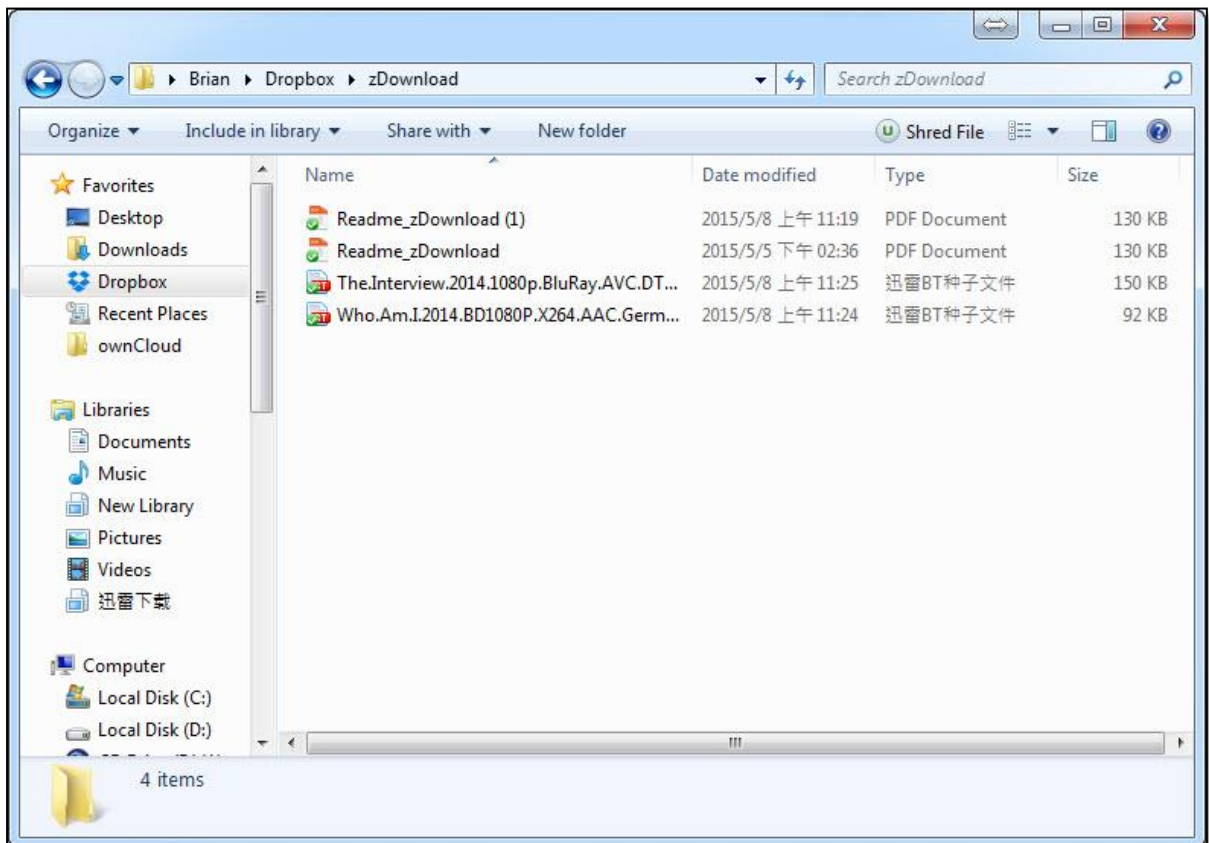
Dropbox status.



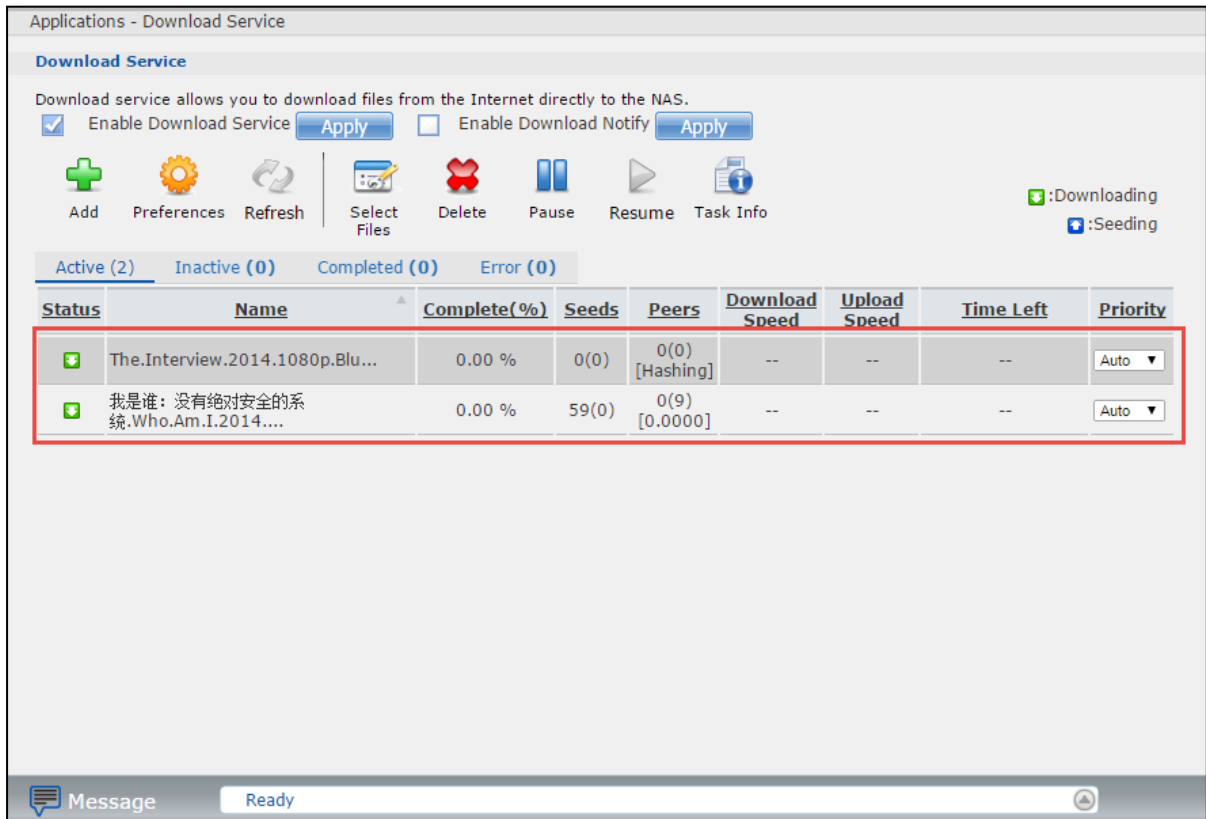
Check files on NAS

4.4 Using the zDownload Folder

The NAS copies *.torrent files in the zDownload folder to the NAS's admin\download \torrents folder and automatically starts download them.



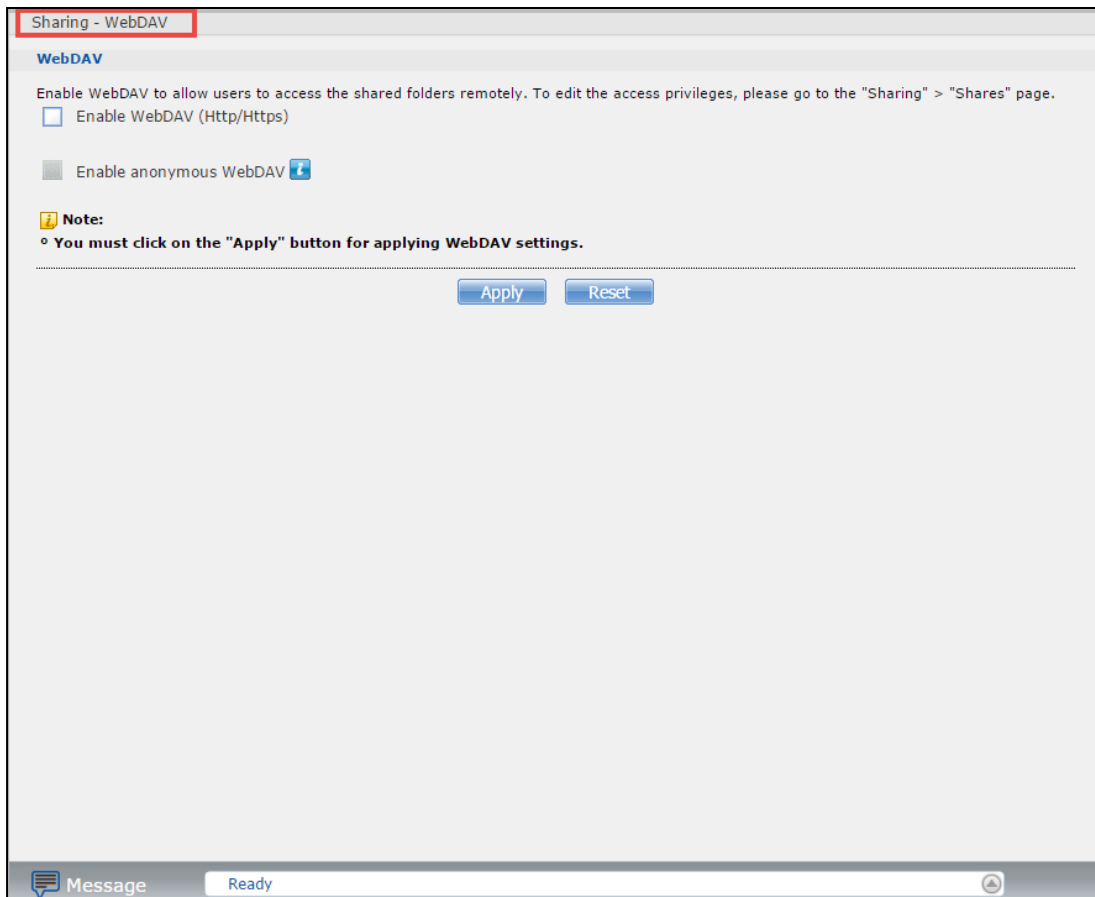
Upload torrent files to zDownload folder.



NAS get files and download automatically

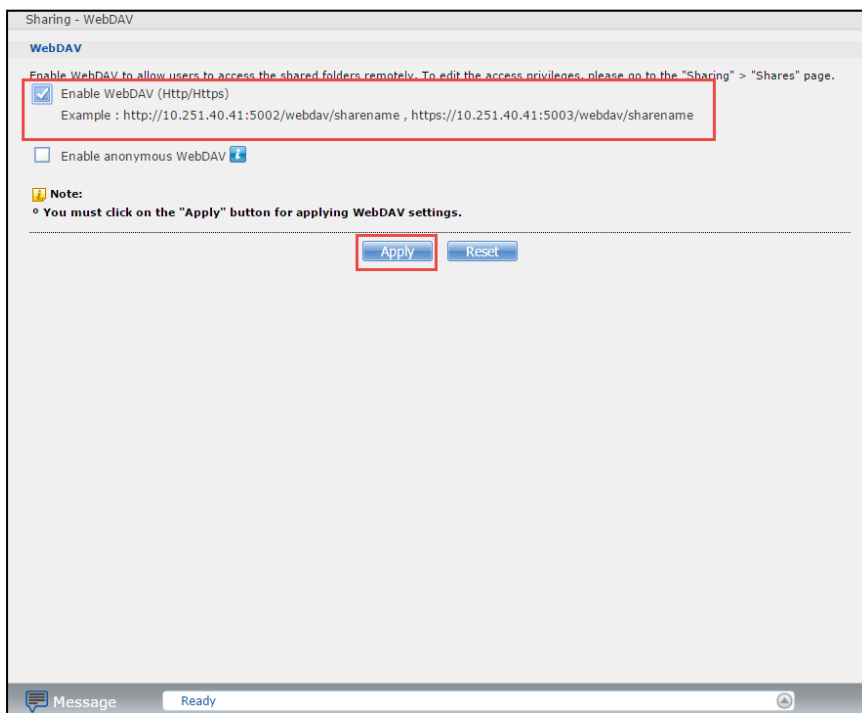
4.5 WebDAV

The WebDAV HTTP extension lets users edit and manage files that are stored.



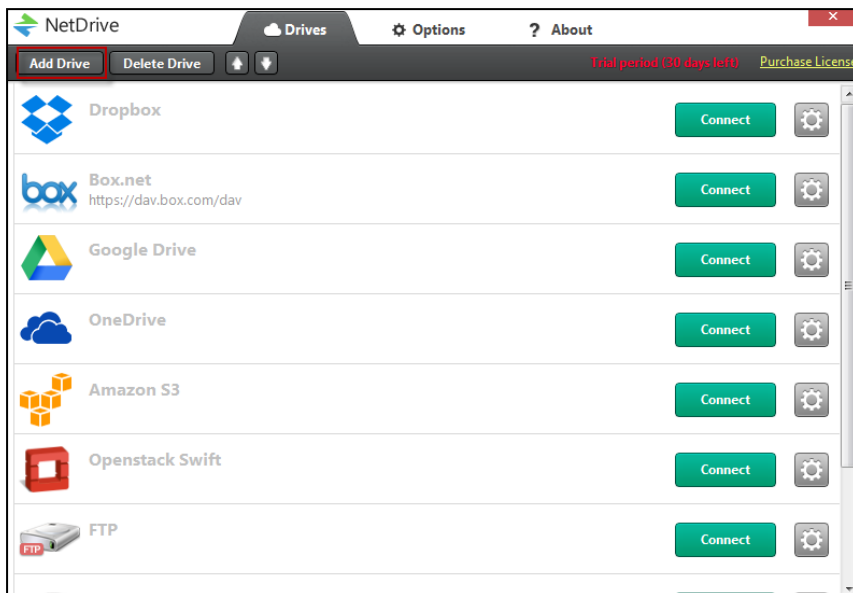
Remote servers.

When you enable WebDAV the screen displays an example of the URL that users would use to use WebDAV to connect to the NAS where “sharename” represents a share that the user can access.



WebDAV screen

Download and install NetDrive. Click on **Add Drive** and use the URL for WebDAV connections to the NAS to add a drive entry for accessing the NAS.

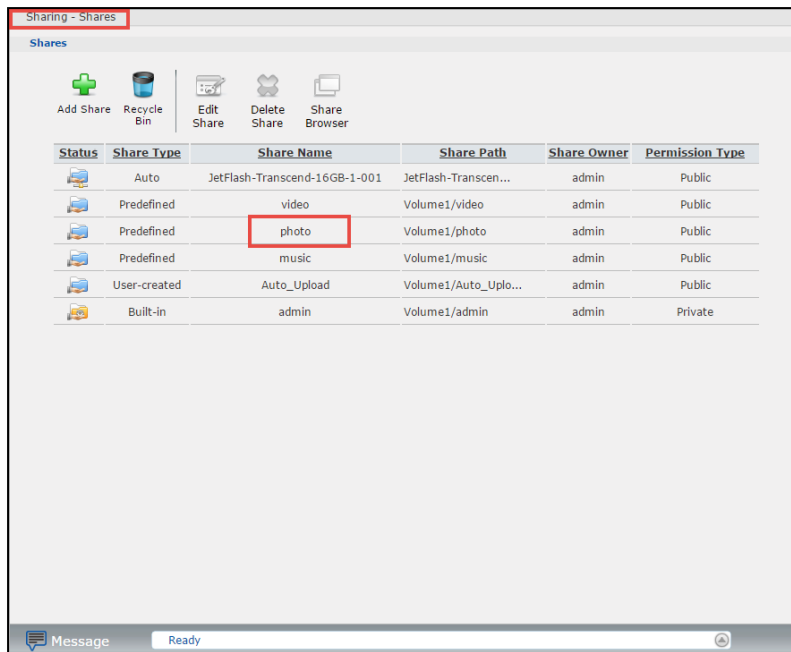


Add Drive

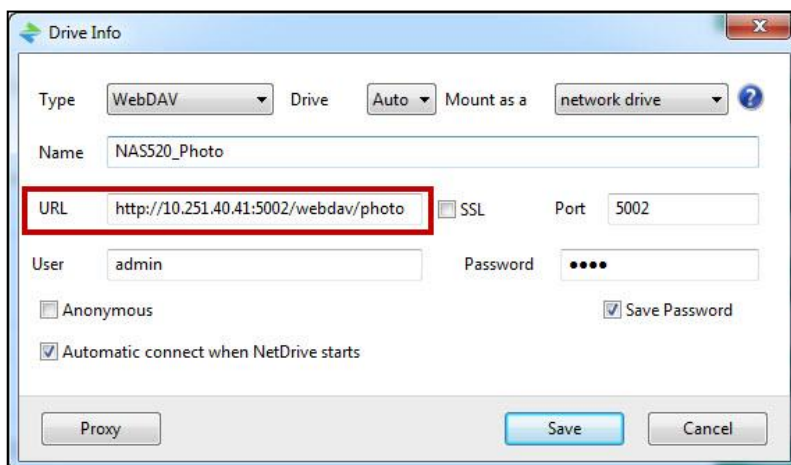
Add Drive:

- Type: Select **WebDAV** from the drop-down menu
- Name: Connection name
- URL: Enter the NAS IP address or domain name and WebDAV folder name.
The shared folder of WebDAV server default path is “http://IP_Address:port/webdav/” + Share_Name
- Port: Default NAS WebDAV server port: 5002, 5003
- Drive: Select a drive letter to connect to this WebDAV shared folder.

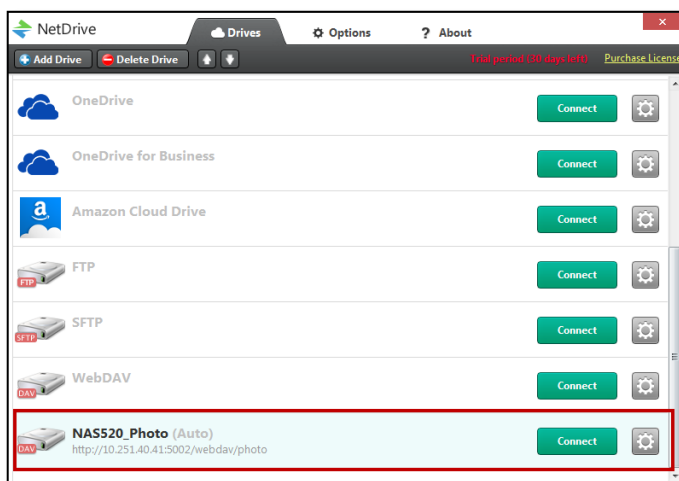
- Account: Enter the user name for this shared folder (the WebDAV folder access permissions belong to share of NAS).
- Password: Enter the password for this shared folder.



Connect to WebDAV shared folder.

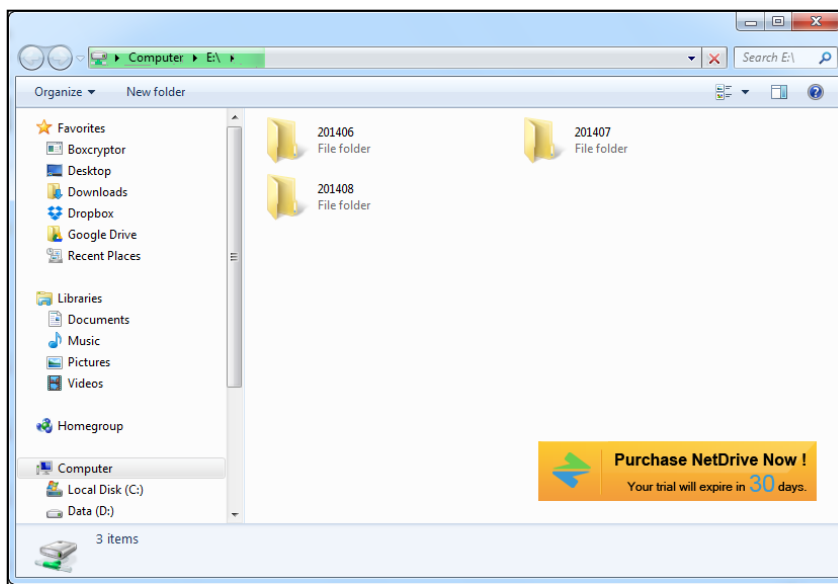


Setting Drive info



Connect to NAS

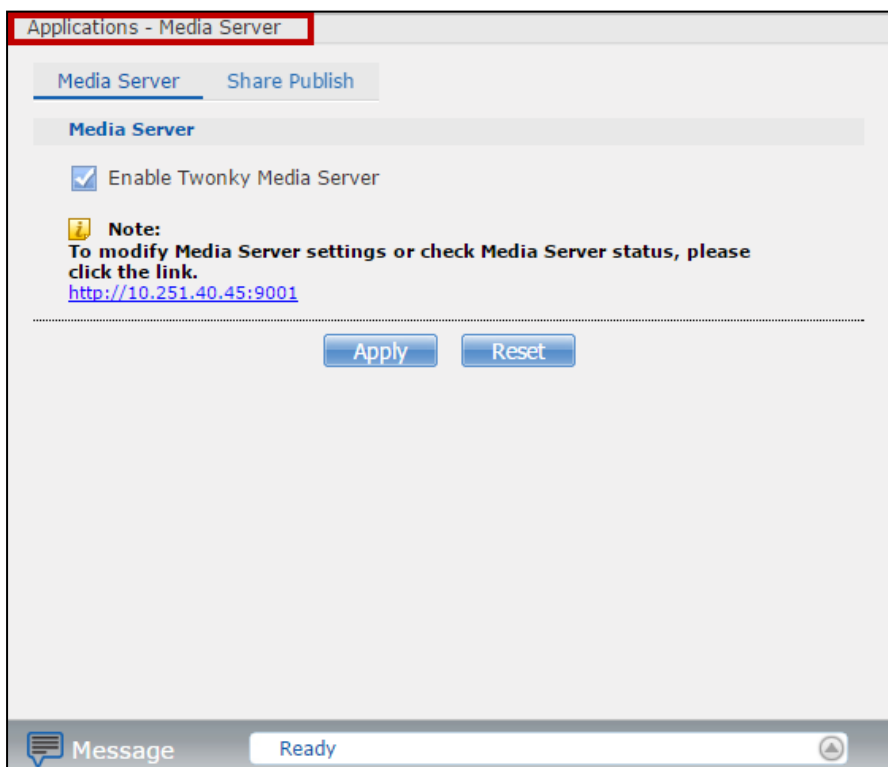
You can access this drive in the future under the Computer listing in Windows Explorer.



Check Windows Explorer

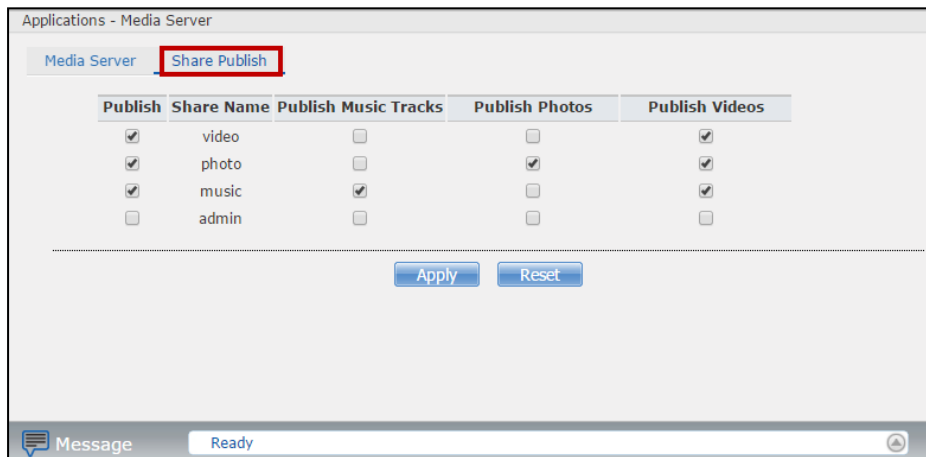
4.6 Media Server

Click on the hyperlink to open the Twonky media server configuration screens to check media server status or modify media server settings.



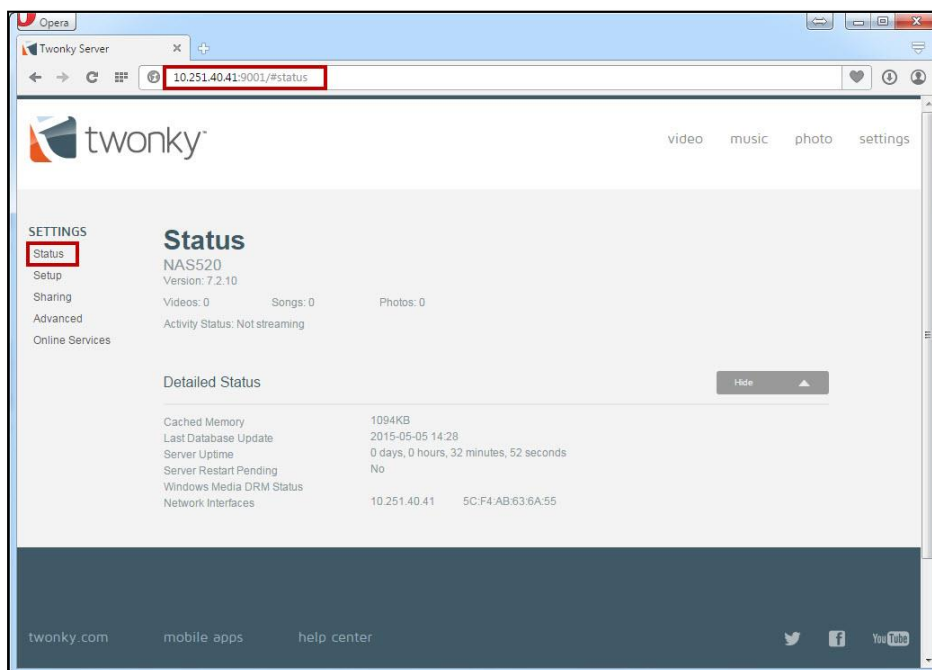
Applications->Media Server

Use this screen to select shares to publish (share with media clients like a media player or iTunes).



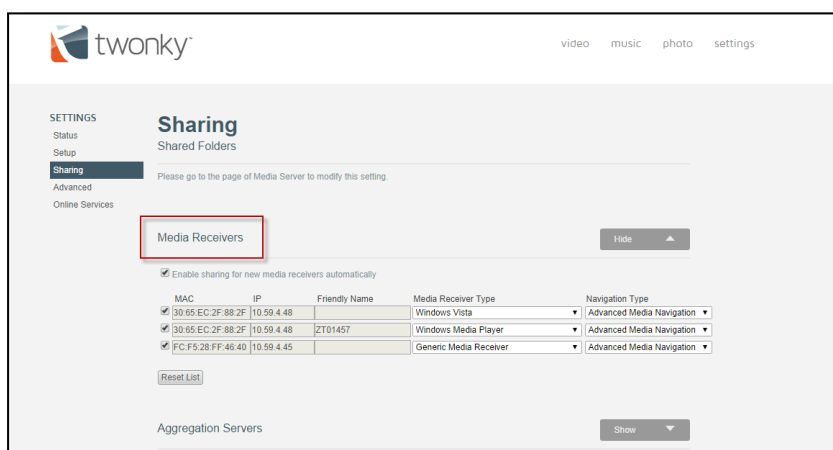
Select share to publish

Click the hyper link to open the Twonky media server configuration screens to check media server status or modify media server settings.



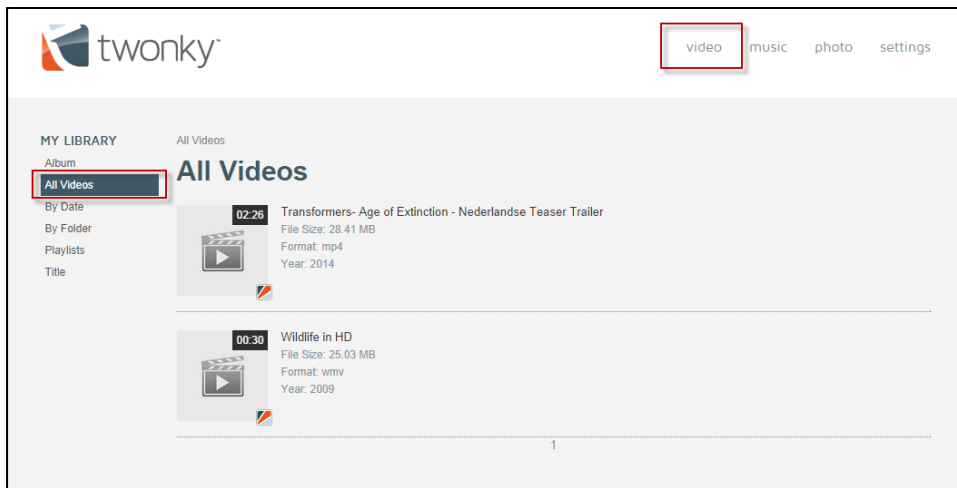
Twonky screen

Twonky auto detects media clients.



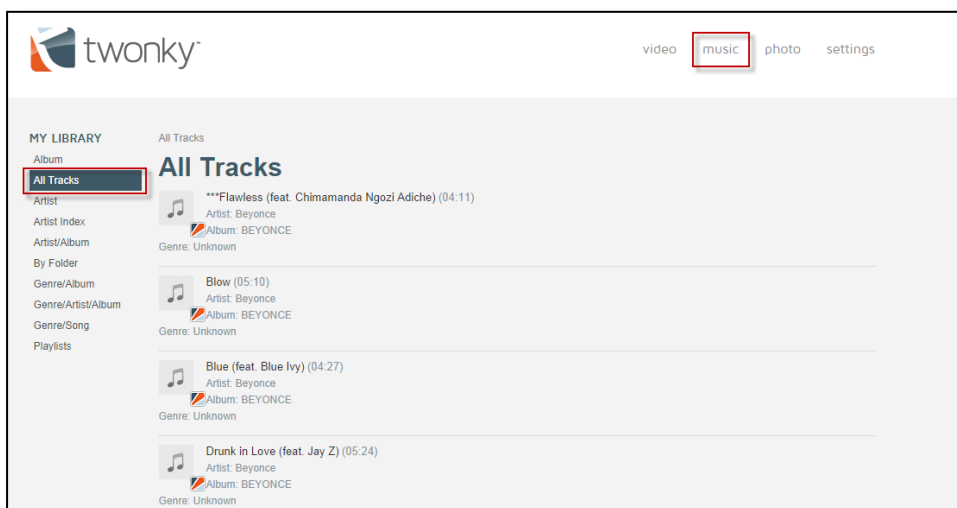
Media Receivers info

Click on **video** to check published video files.



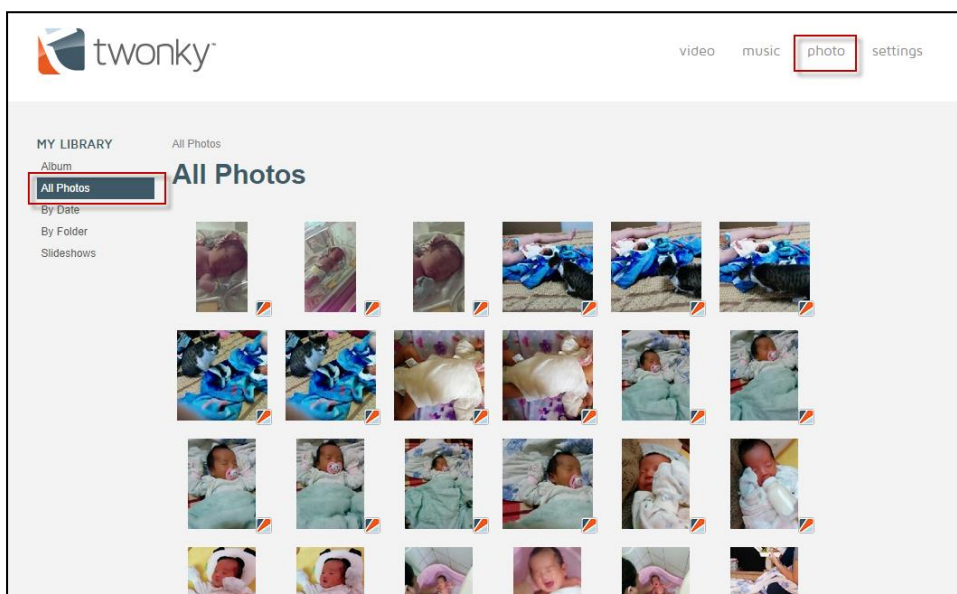
Publish video files

Click on **music** to check published music files.



Publish music files

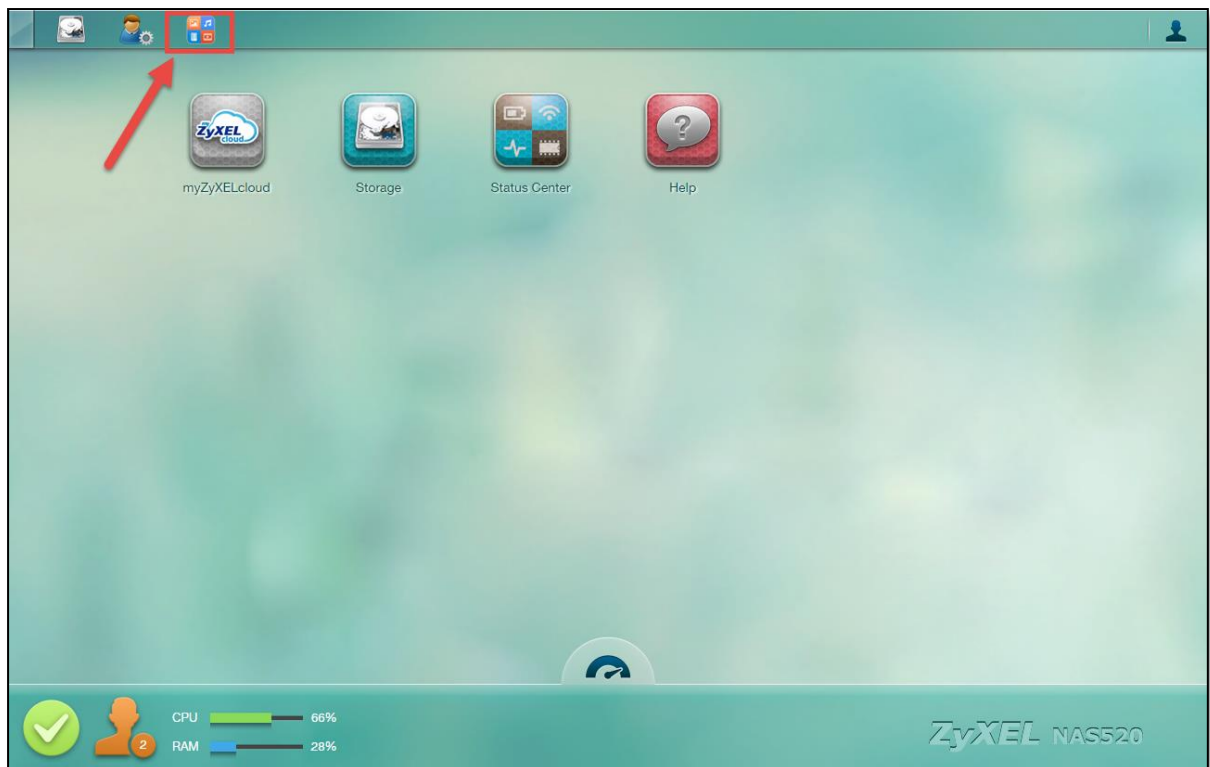
Click on **photo** to check published photo files.



Publish photo files

5. PlayZone

The **DeskTop** screen displays. You can click on the icon to listen to the music, watch the movies, or enjoy the photos stored in the NAS.



NAS DeskTop Screen.

The Playzone **Home** screen displays icons for the various features you can access.



Playzone screen

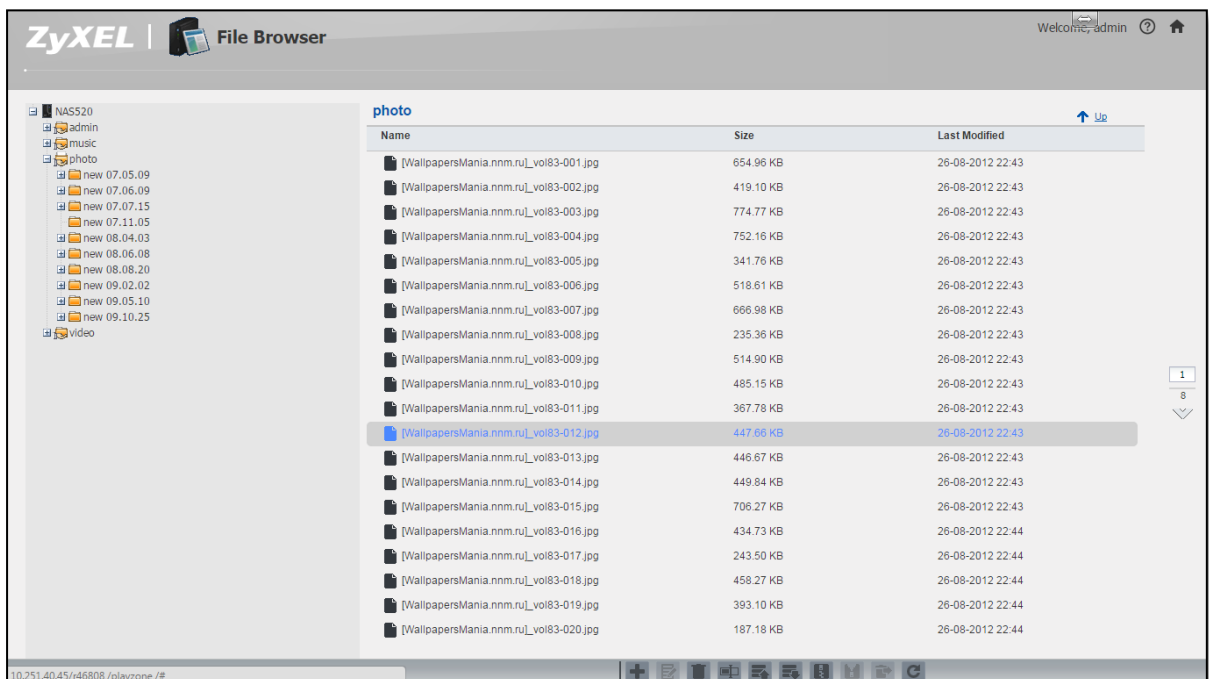
5.1 File Browser

Use **File Browser** to see files in a tree-folder structure.



File browser screen

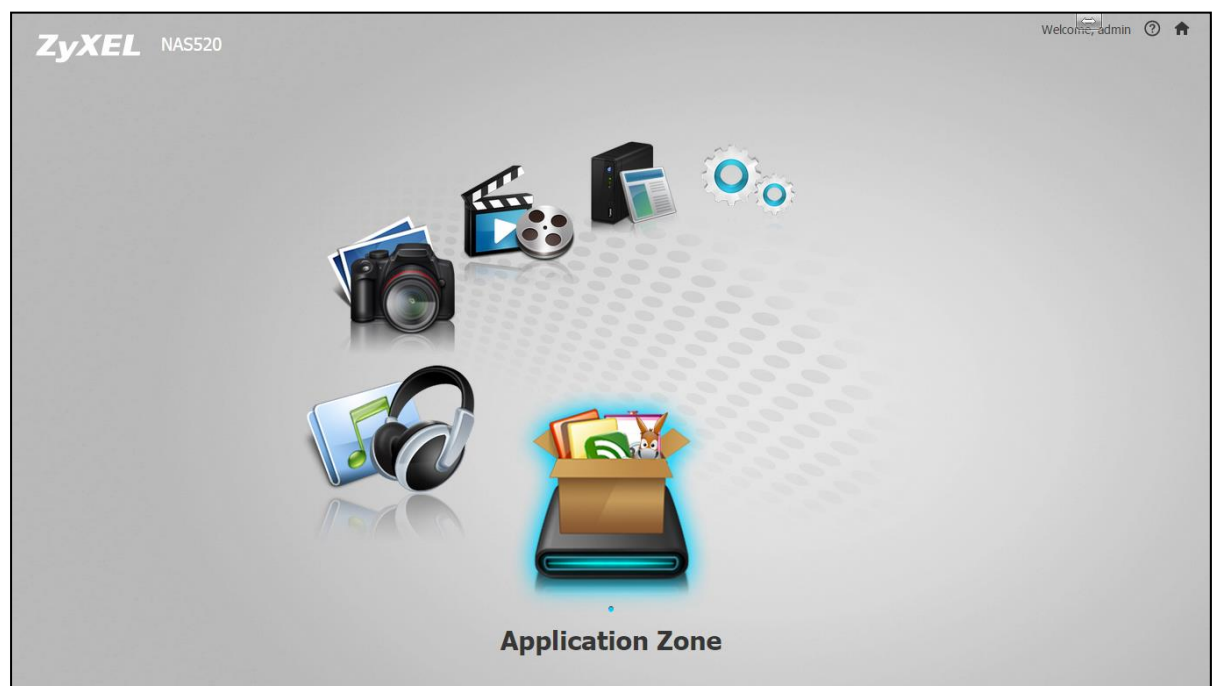
Use the file browsing screens to play, open, upload, and download files. A share is a set of user access permissions for a specific folder on a volume (gives someone access to a folder).



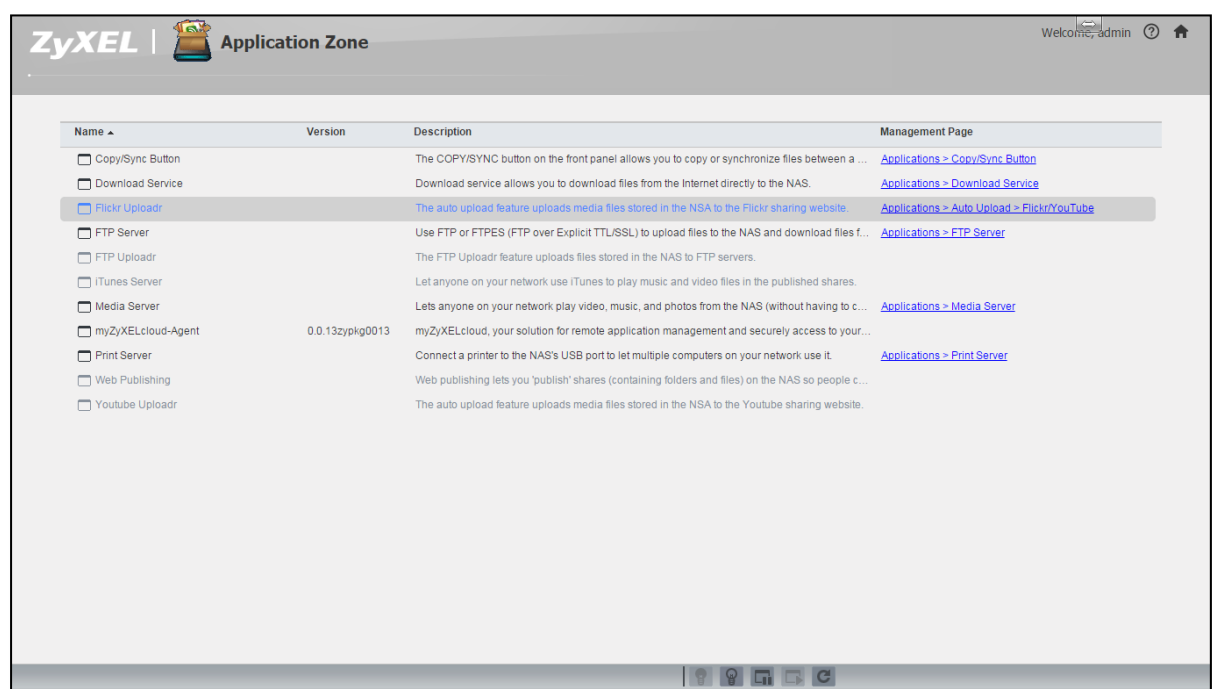
Files in file browser

5.2 Application Zone

Administrators can click **Application Zone** to go to a screen where you can enable or disable various applications for file sharing and downloading.



Application Zone screen



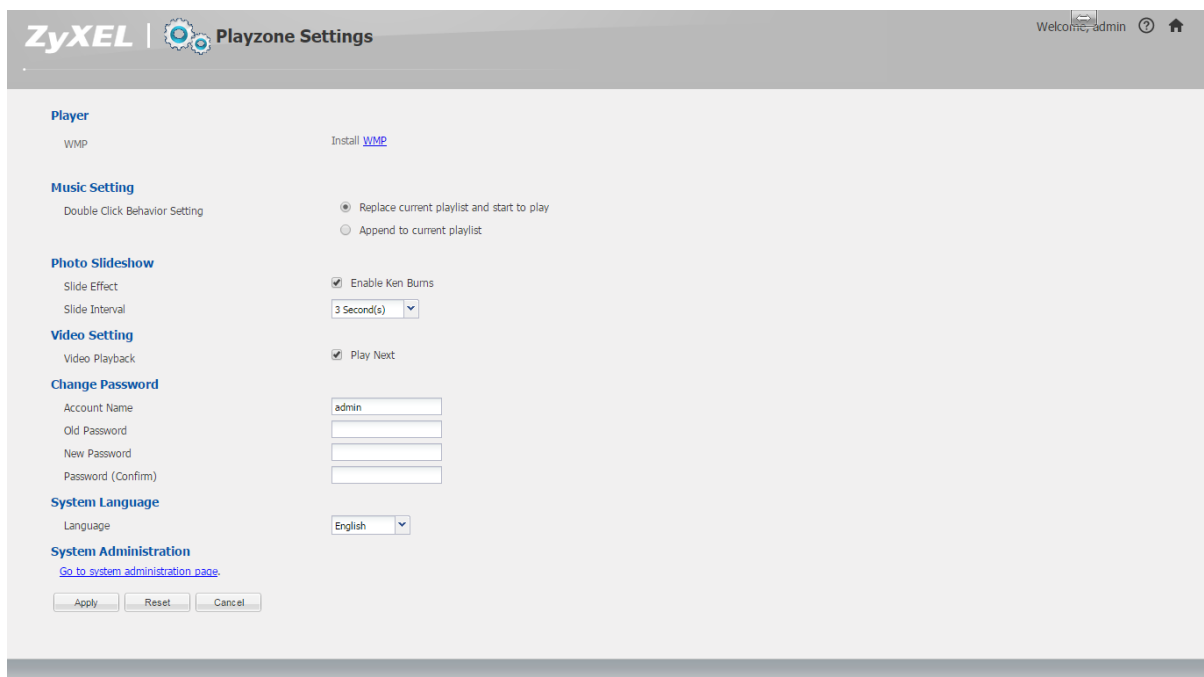
Application information

5.3 Playzone Settings

Use this screen to change general Playzone screen settings and account passwords.



Playzone settings

The image shows the 'Playzone Settings' configuration page. The header includes the 'ZyXEL' logo and the title 'Playzone Settings'. The right side of the header shows 'Welcome, admin' with user, help, and home icons. The main content area is divided into several sections:

- Player**: Includes a 'WMP' label and a link to 'Install WMP'.
- Music Setting**: Includes a 'Double Click Behavior Setting' with two radio buttons: 'Replace current playlist and start to play' (selected) and 'Append to current playlist'.
- Photo Slideshow**: Includes 'Slide Effect' and 'Slide Interval' (set to '3 Second(s)').
- Video Setting**: Includes 'Video Playback' with a checked 'Play Next' option.
- Change Password**: Includes fields for 'Account Name' (pre-filled with 'admin'), 'Old Password', 'New Password', and 'Password (Confirm)'.
- System Language**: Includes a 'Language' dropdown menu set to 'English'.
- System Administration**: Includes a link 'Go to system administration page'.

At the bottom of the settings area are three buttons: 'Apply', 'Reset', and 'Cancel'.

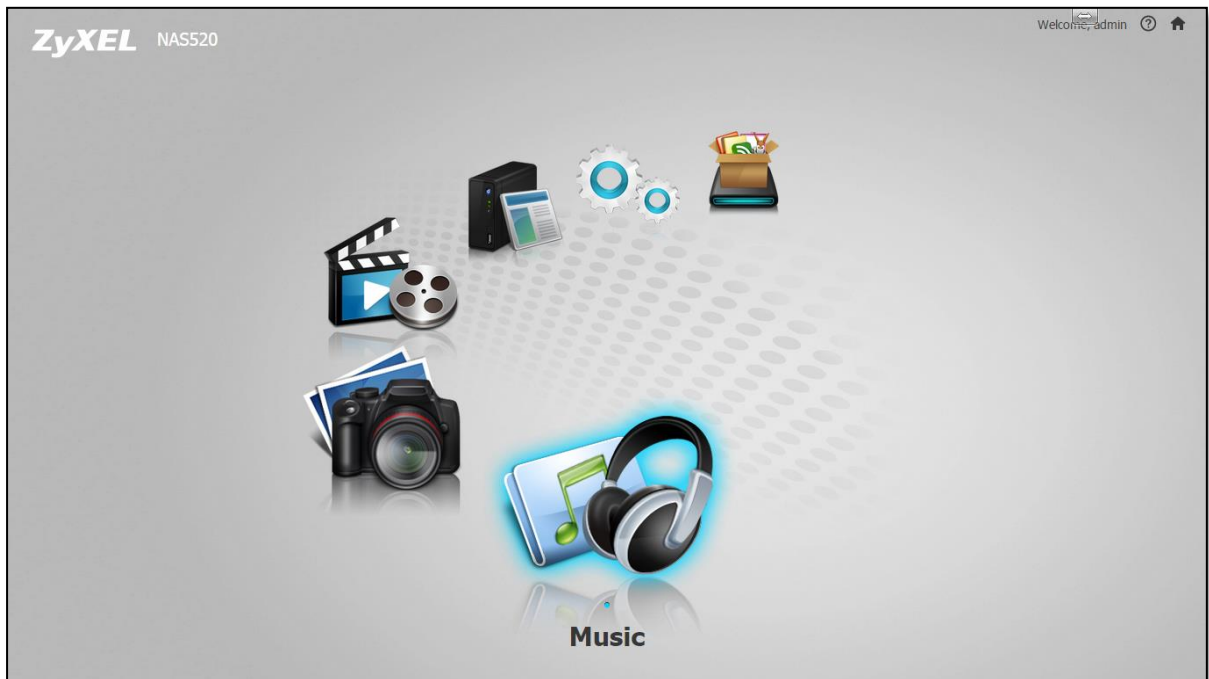
Playzone setting screen

5.4 Music

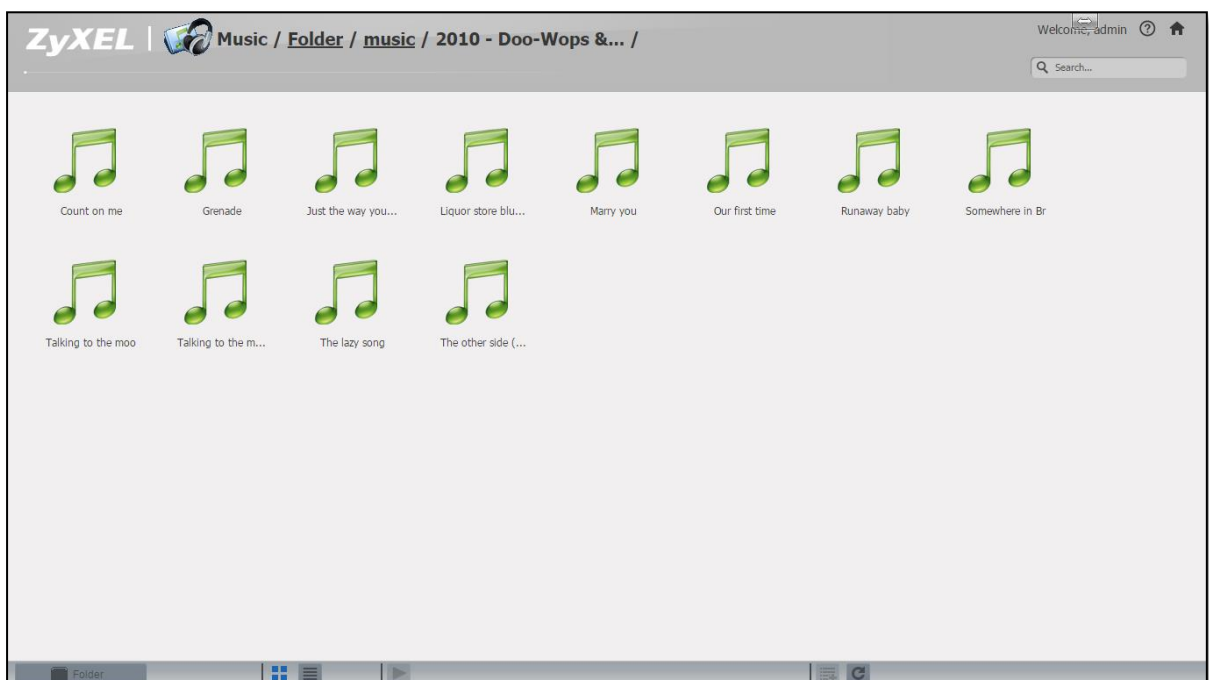
Use the Playzone media server screens to view and play media files in the shares that publish them.

Your browser may need Windows Media Player installed to play music and video files.

Use **Music** to view and play music files in the shares that publish music.



Music screen



Music folder.

5.5 Photo

Use **Photo** to view photos in the shares that publish photos.

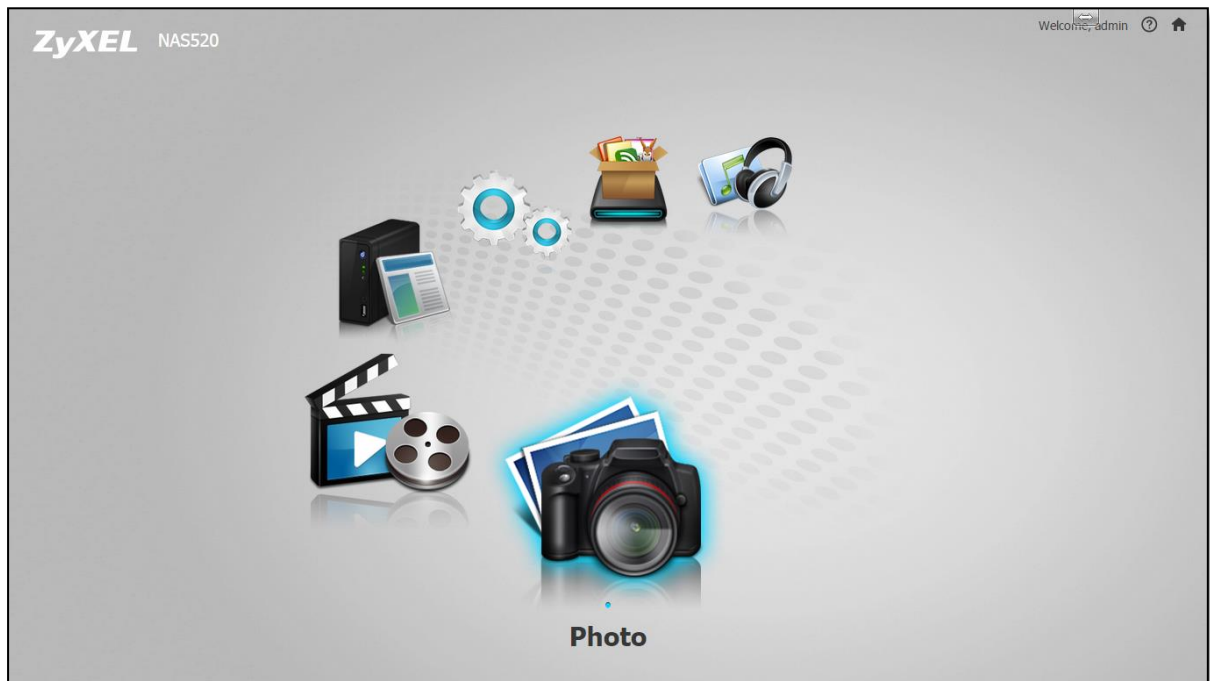
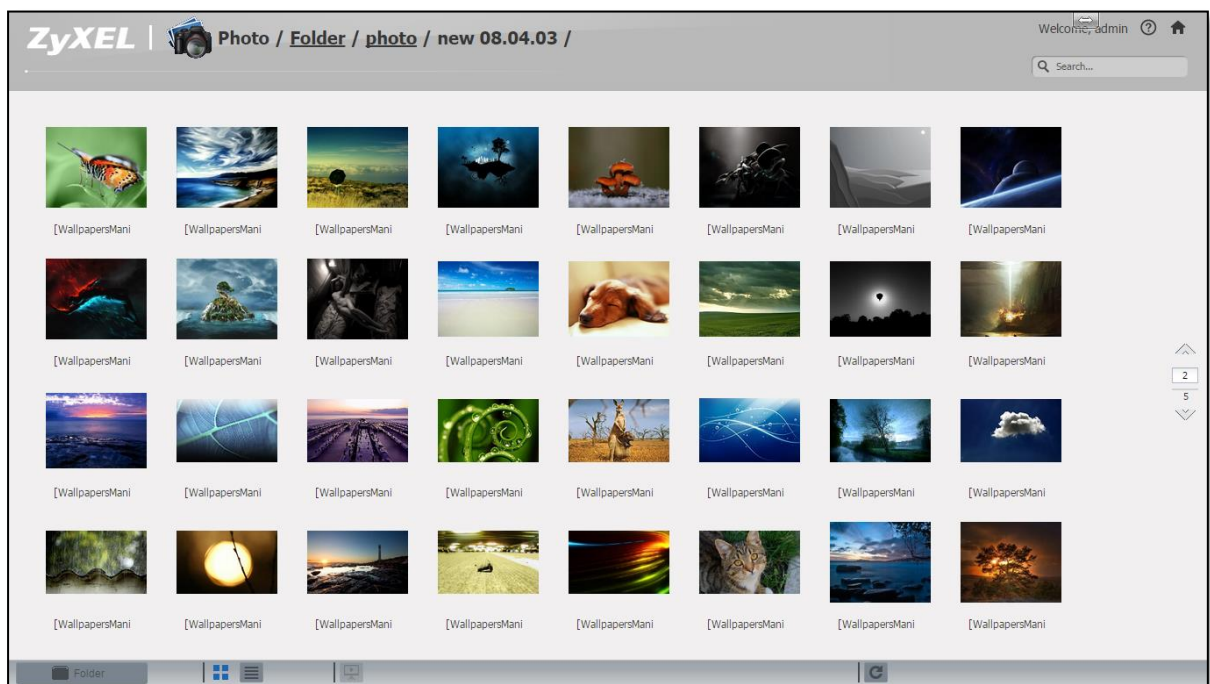
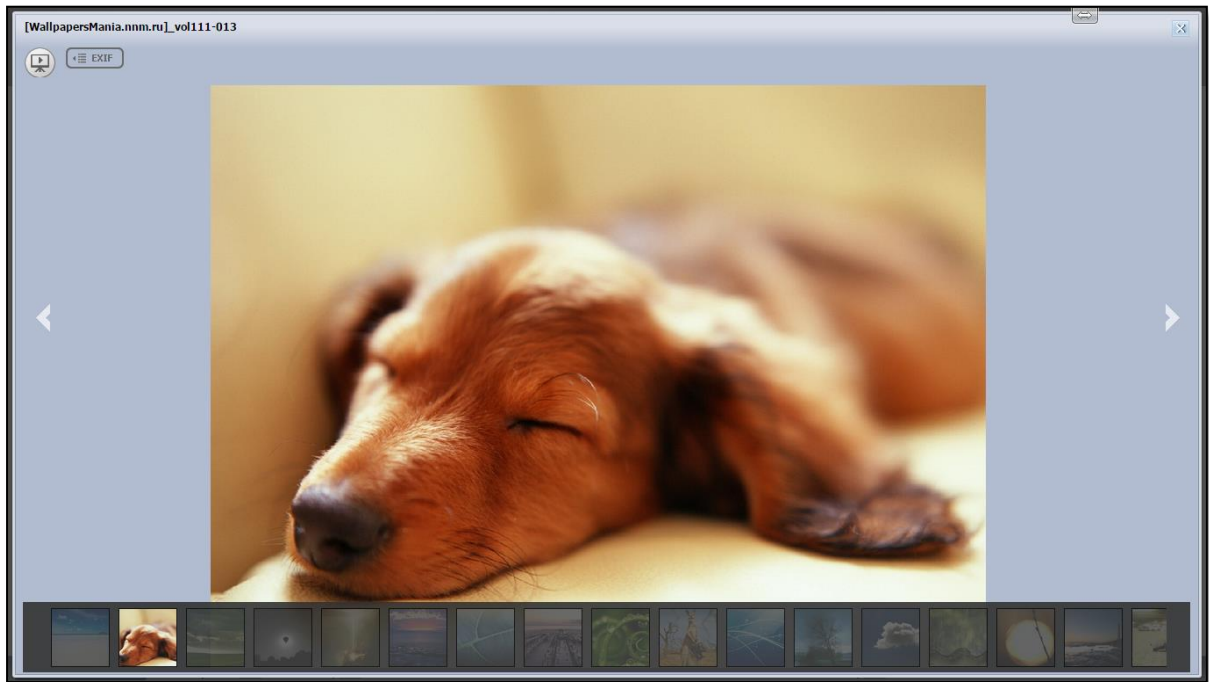


Photo screen



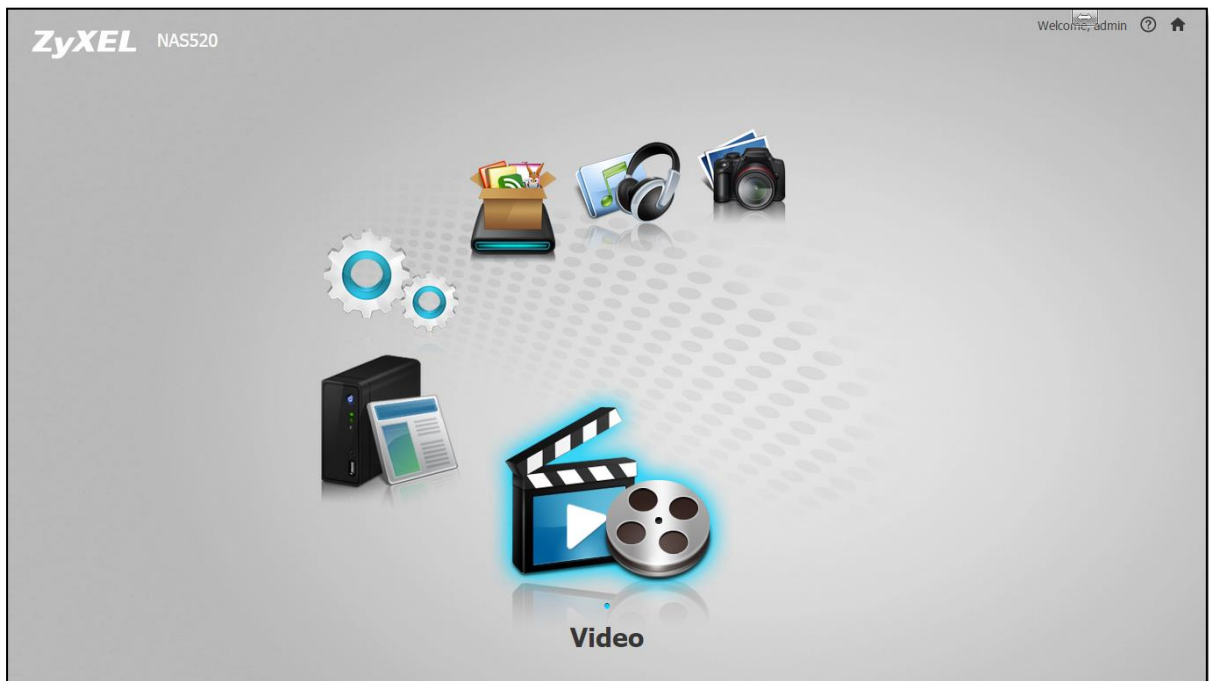
Check photo files in Playzone



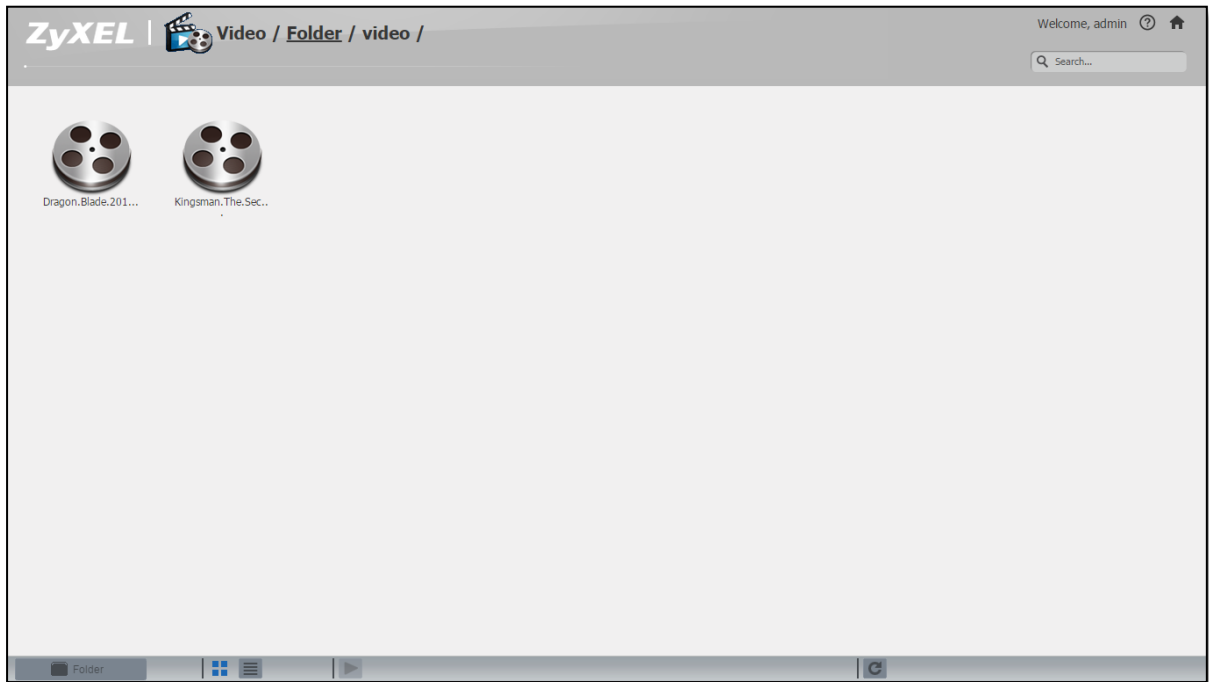
Review photo

5.6 Video

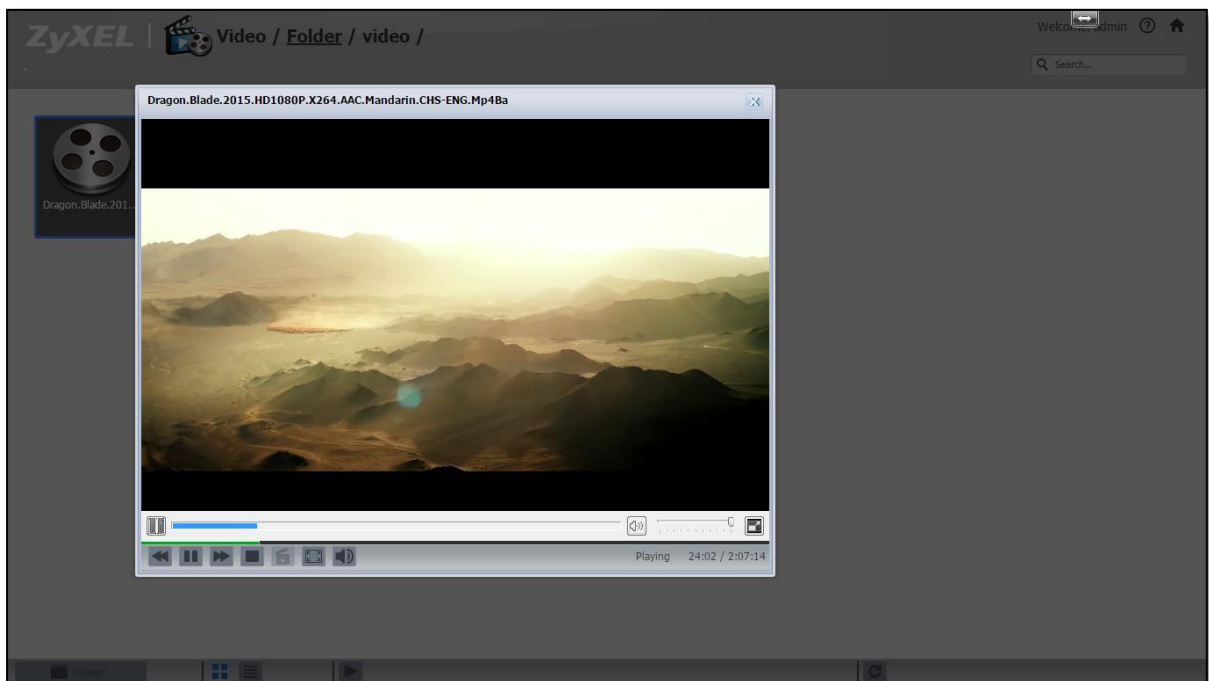
Use **Video** to view and play video files in the shares that publish videos.



Video screen



Video files

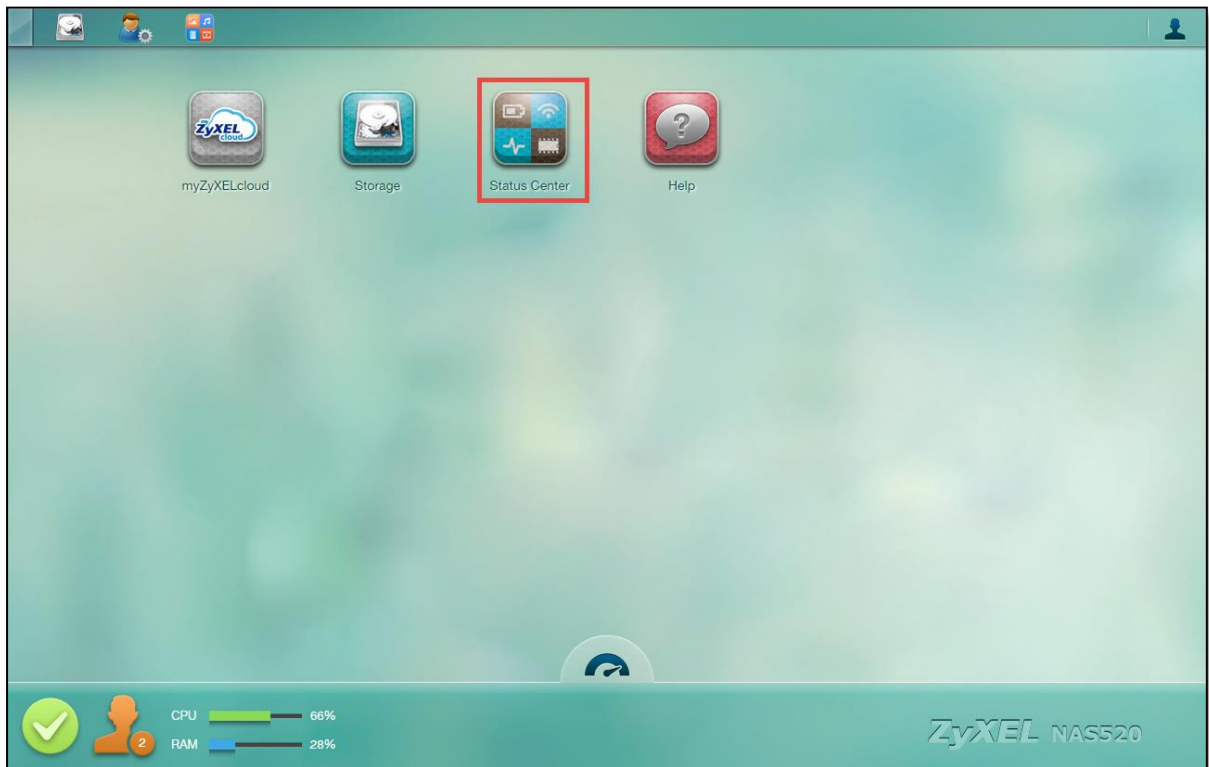


Play video file via Playzone

*If you find that the media files are not displayed correctly, please check the status in **Applications > Media Server**. Usually, you will see the photos displayed.*

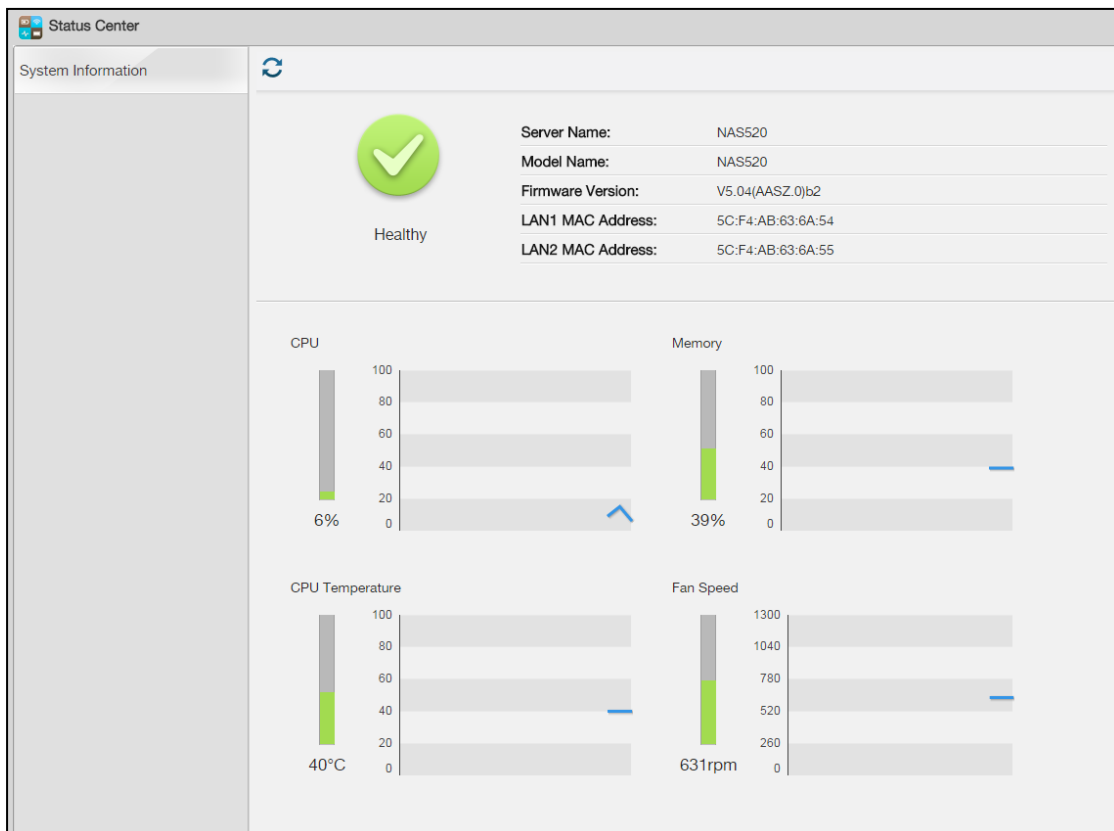
6. Status Center

In the **DeskTop** screen, click on **Status Center** to display this screen of NAS status information.



DeskTop

Click the **Refresh** icon to update display the CPU, Memory, CPU Temperature and Fan Speed.

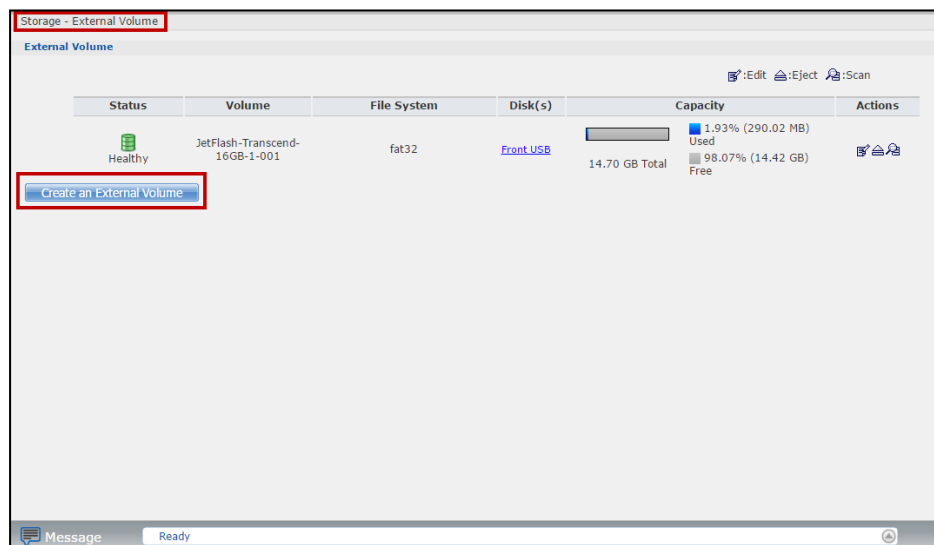


Monitor system status

7. External Volume

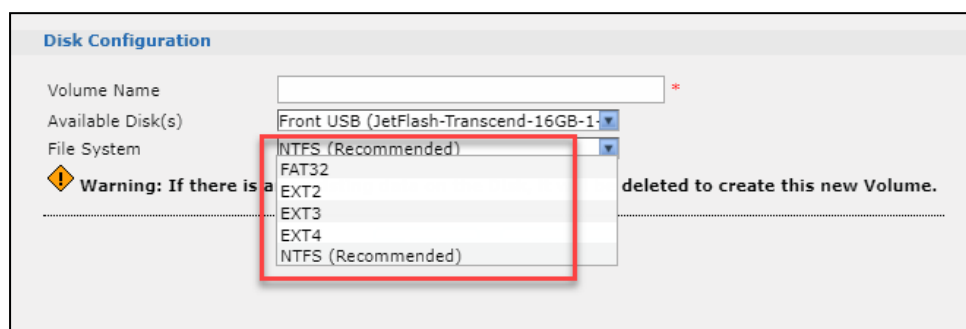
This page displays information on all external volumes (created on external disk drives attached to the NAS USB ports).

Use this screen to create a new NAS external disk drive volume.

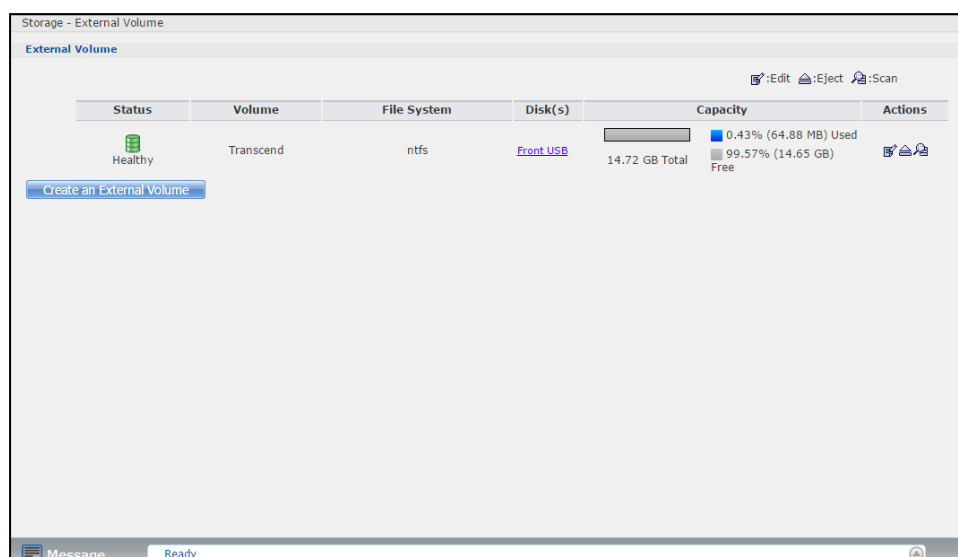


Create external volume in this page

NAS supports NTFS, FAT32, EXT2, EXT3 and EXT4 as external volume. Select the file system that you want the new volume to use.



Select external volume settings



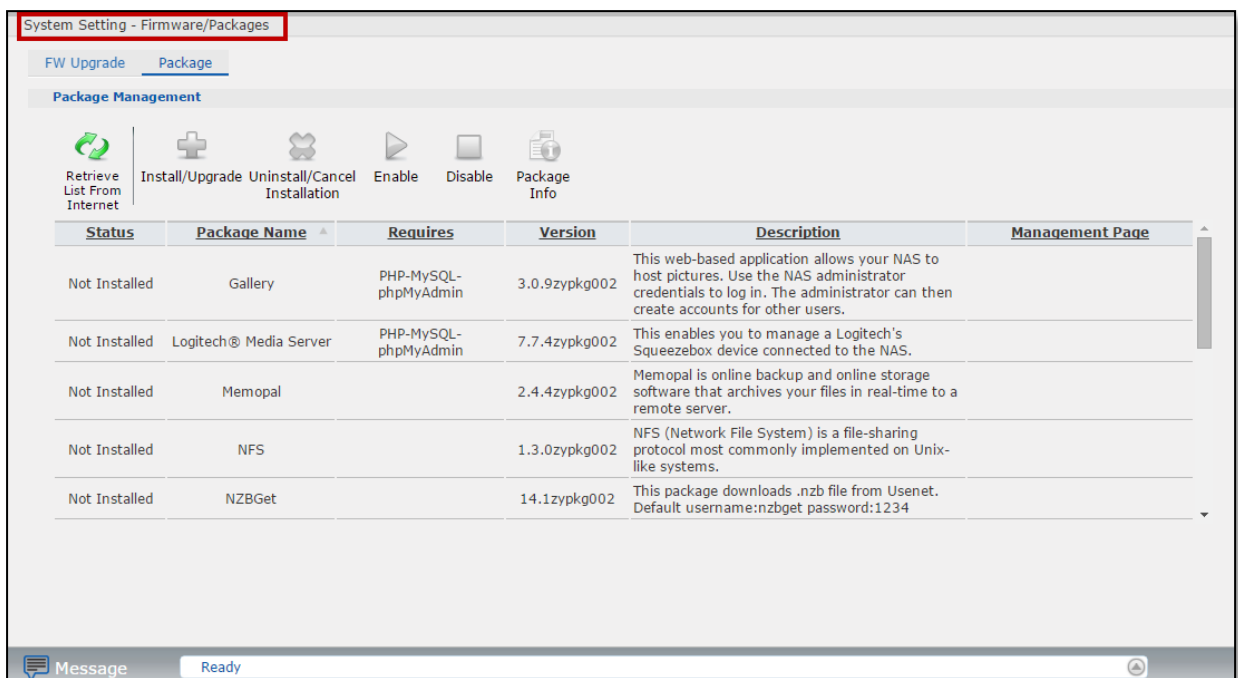
Finish create external volume

8. APP Center

Package management is used to setup more useful applications in the NAS. This feature enables users to use the following applications:

- CloudAgent (myZyXELcloud)
- Gallery
- Memopal
- NFS
- NZBGet
- PHP-MySQL-phpMyAdmin
- Logitech® Media Server
- TFTP
- Transmission
- WordPress
- ownCloud
- pyLoad

Click **System Setting > Firmware/Packages** to display the screen. Then the applications are will be listed as shown below.

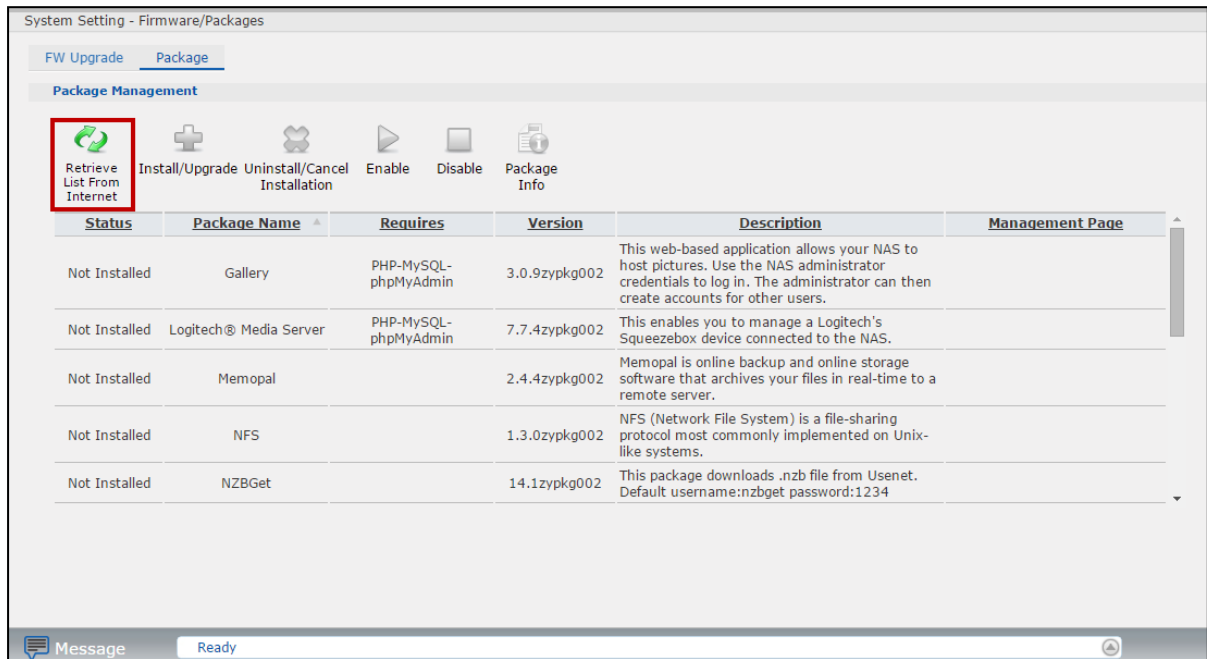


The screenshot shows the 'System Setting - Firmware/Packages' interface. The 'Package' tab is selected. Below the tab, there are icons for 'Retrieve List From Internet', 'Install/Upgrade', 'Uninstall/Cancel Installation', 'Enable', 'Disable', and 'Package Info'. A table lists available packages, all of which are 'Not Installed'. The table has columns for Status, Package Name, Requires, Version, Description, and Management Page.

Status	Package Name	Requires	Version	Description	Management Page
Not Installed	Gallery	PHP-MySQL-phpMyAdmin	3.0.9zypkg002	This web-based application allows your NAS to host pictures. Use the NAS administrator credentials to log in. The administrator can then create accounts for other users.	
Not Installed	Logitech® Media Server	PHP-MySQL-phpMyAdmin	7.7.4zypkg002	This enables you to manage a Logitech's Squeezebox device connected to the NAS.	
Not Installed	Memopal		2.4.4zypkg002	Memopal is online backup and online storage software that archives your files in real-time to a remote server.	
Not Installed	NFS		1.3.0zypkg002	NFS (Network File System) is a file-sharing protocol most commonly implemented on Unix-like systems.	
Not Installed	NZBGet		14.1zypkg002	This package downloads .nzb file from Usenet. Default username:nzbget password:1234	

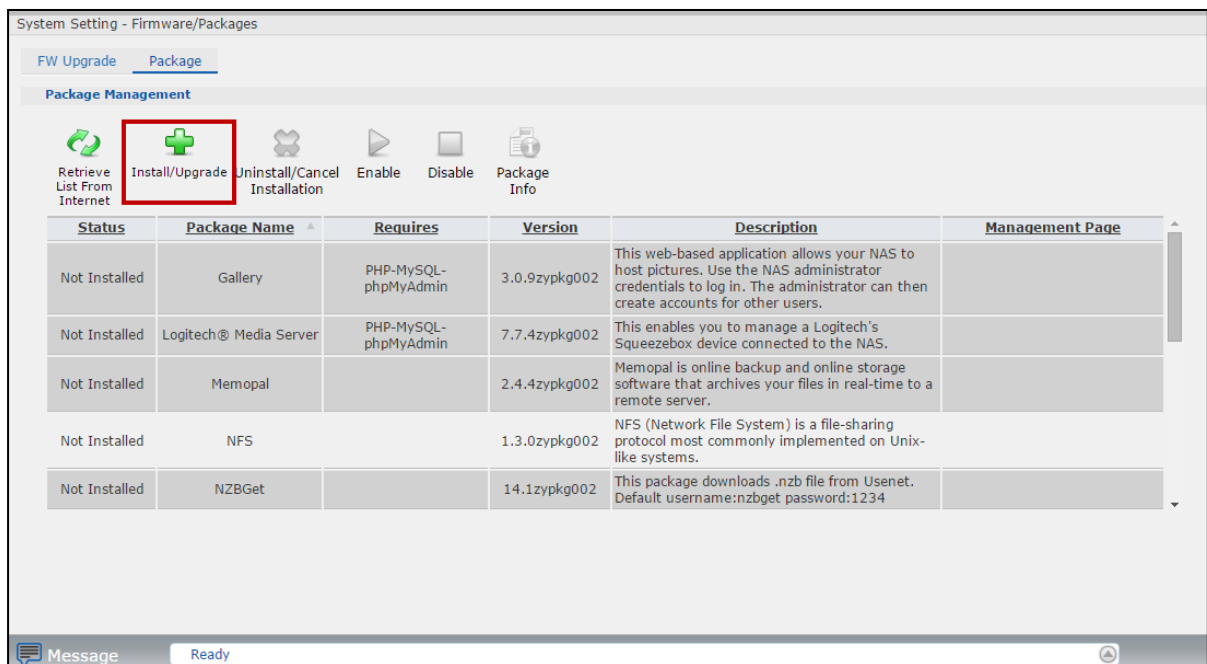
Package list

Click on this to retrieve a list of available packages from the ZyXEL website.



Refresh the package list

Choose the item(s) on the list and click on the **Install/Upgrade** button to install the selected application(s) on your system or upgrade to the latest version if you have previously installed the application.



Install packages

8.1 Gallery

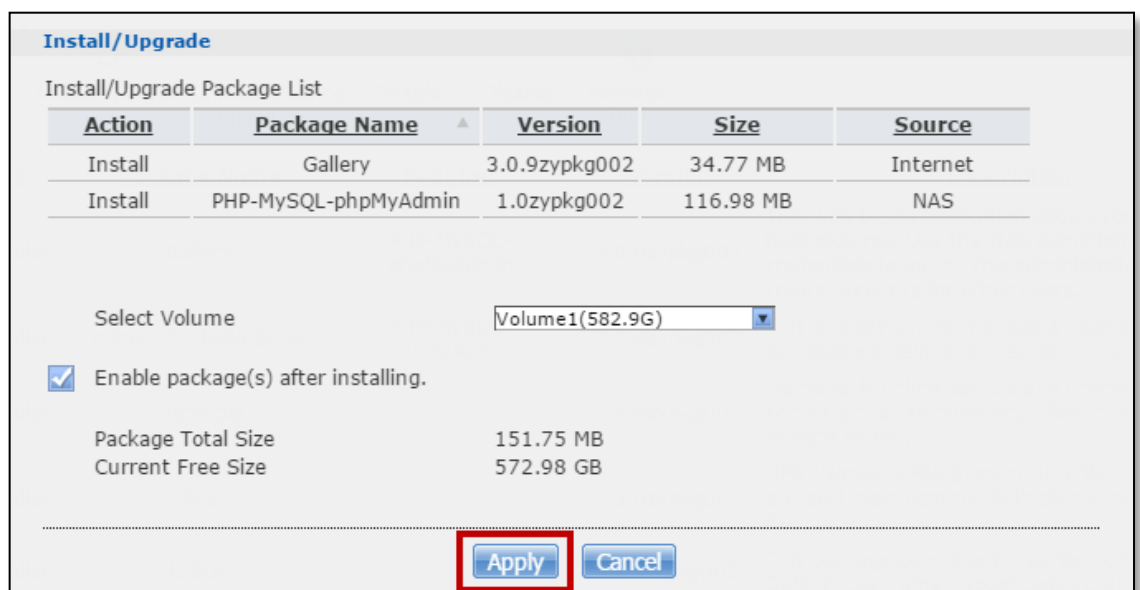
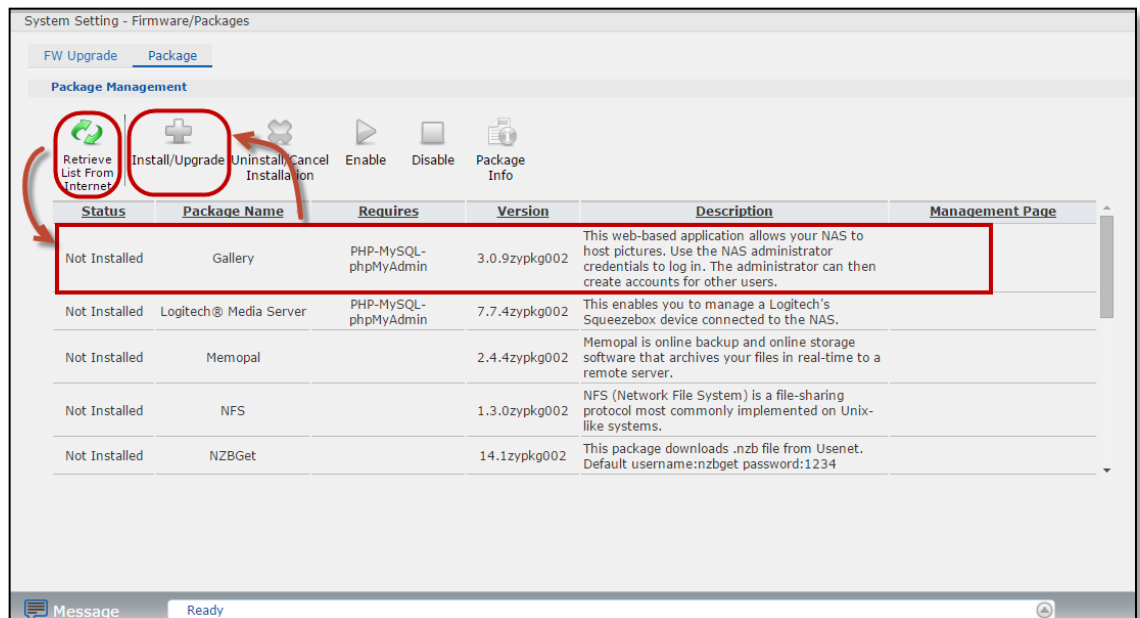
Gallery is a web-based application that allows the NAS to host photos. You can upload photos from the local computers or stored in the NAS. Use the administrator account of the NAS to login to the Gallery GUI.

(The Google Chrome browser blocks port 6666. Therefore we suggest using Firefox to enable the Gallery page).

8.1.1 Installing Gallery from the Package Management

STEPS

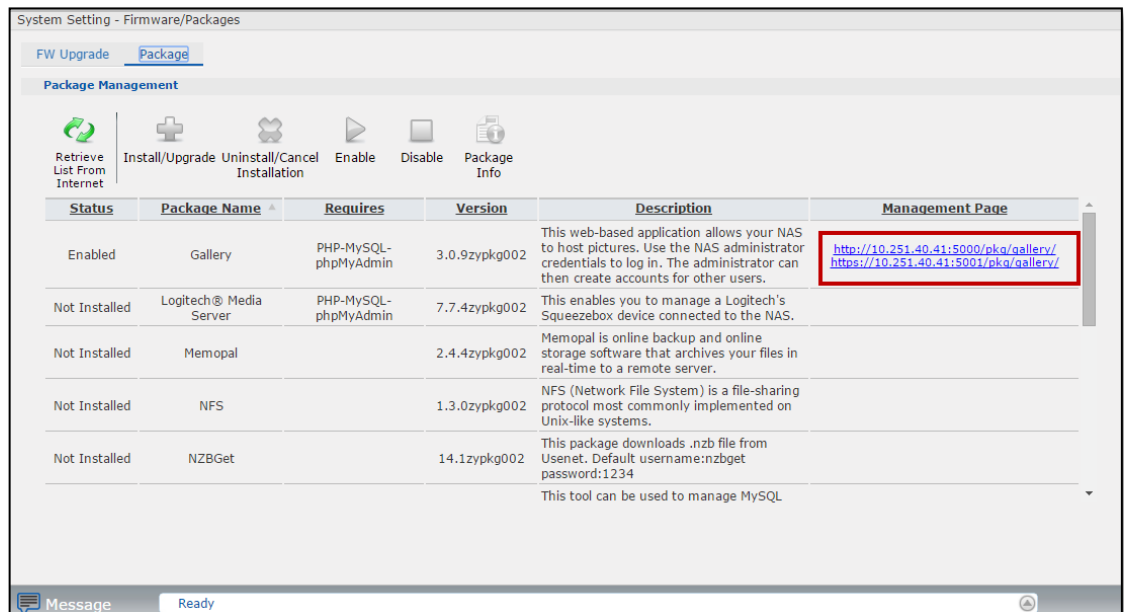
- ✓ Log into the NAS using **NAS Starter Utility** or a **Web browser**.
- ✓ Click **System Setting > Firmware/Packages > Package**.
- ✓ Click **Retrieve List From Internet**, select the **Gallery package** from the table and then click the **Install/Upgrade** button
- ✓ Click **Apply** to install the **Gallery** package.



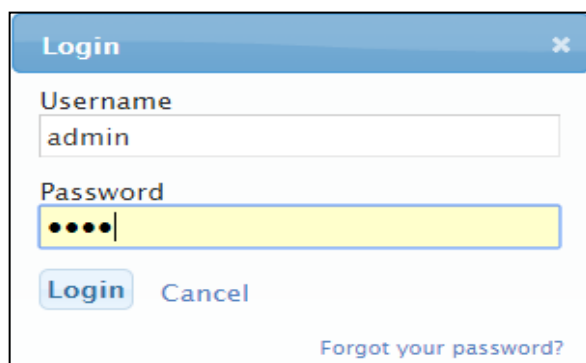
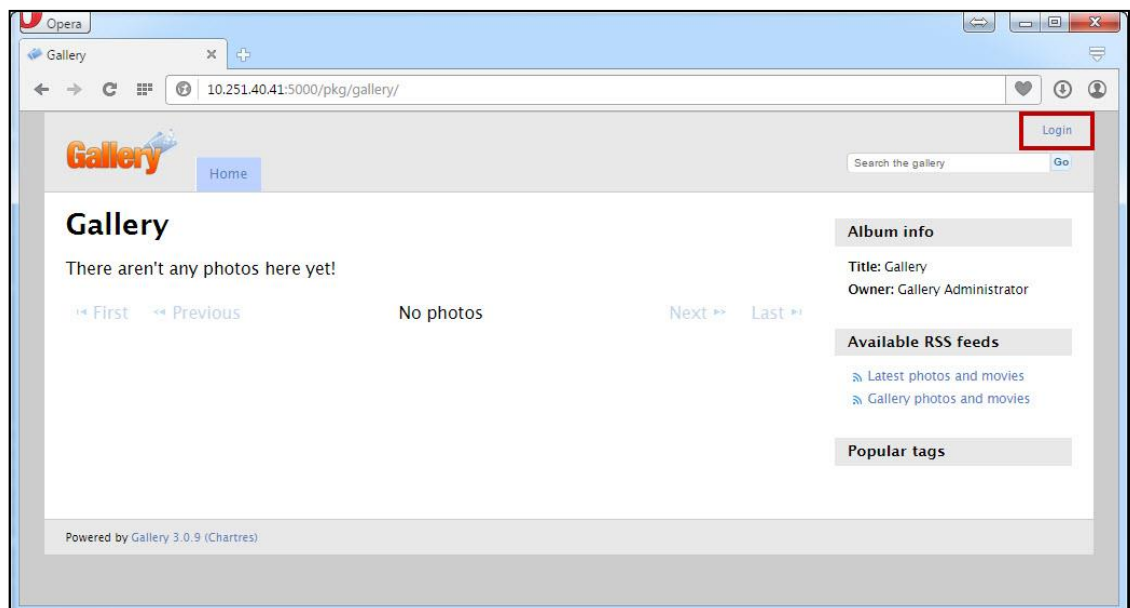
8.1.2 Configuring Gallery on the NAS

STEPS

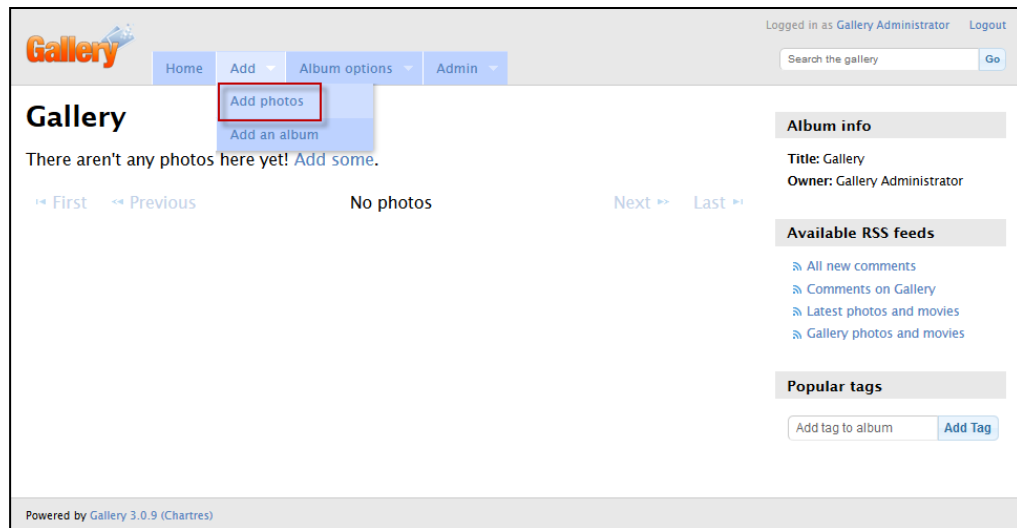
- ✓ After installing and running Gallery, click **Application > Gallery** to configure an account.



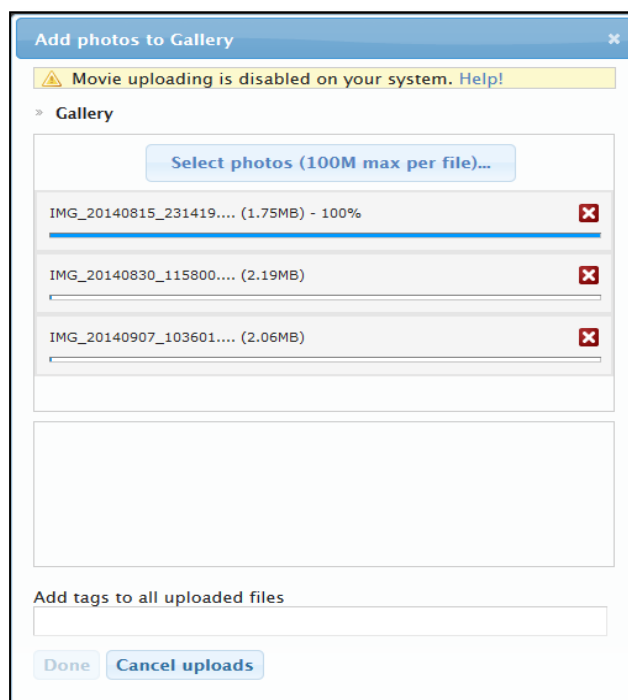
- ✓ Enter the admin **account** and **password** to log into Gallery



- ✓ Click **Add > Add Photos**.

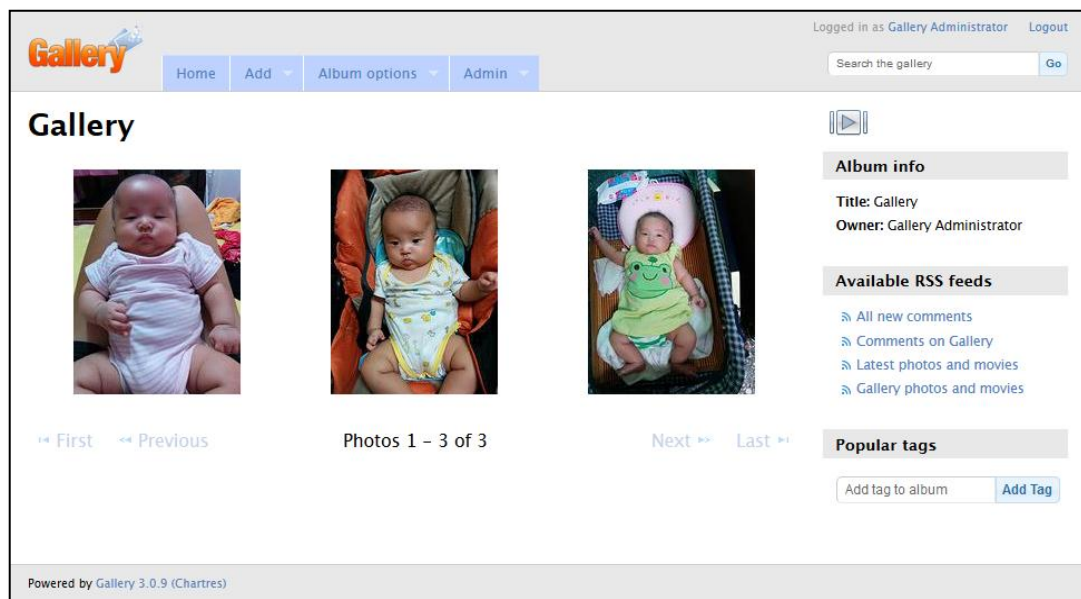


- ✓ Choose photos from a local PC.



8.1.3 Check the photos in Gallery

- ✓ Go to the Gallery **Home** page and check the photos.



8.2 Memopal

Memopal is a cloud-based storage application and service that enables users to store and synchronize computer files, and share files and folders with other users via the Internet.

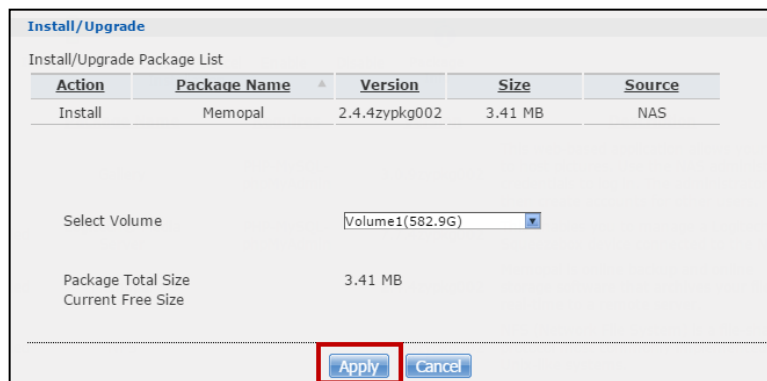
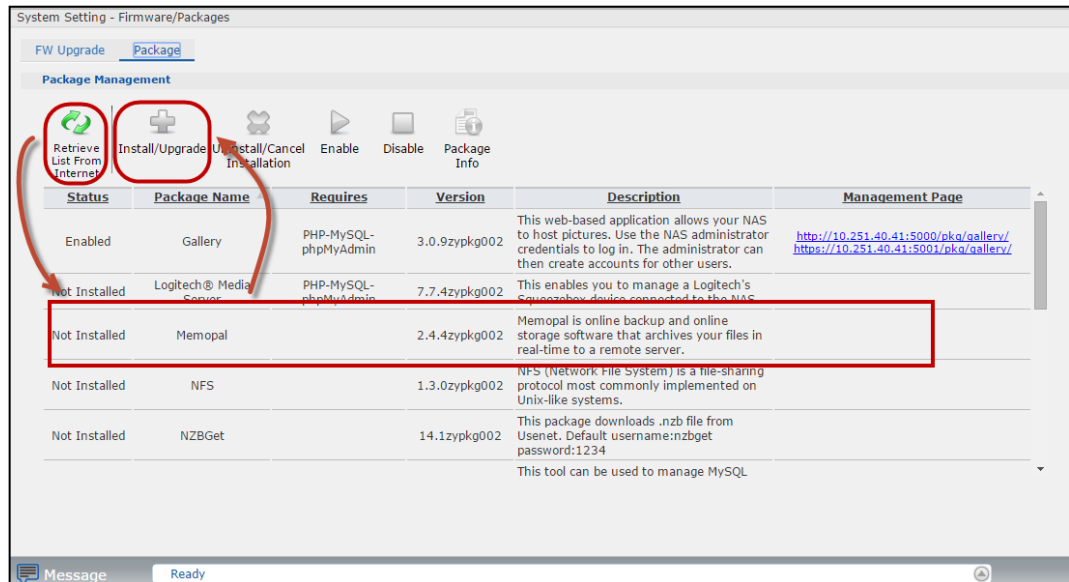
Memopal protects files and allows anytime access using the proper credentials from any computer, smartphone or tablet connected to the Internet. The files are wherever there is a device connected to the Internet.

A total of 3 GB free storage space is allotted per one registered account across devices, and users can purchase additional space through the Memopal website: <http://www.memopal.com/>.

8.2.1 Installing Memopal from the Package Management

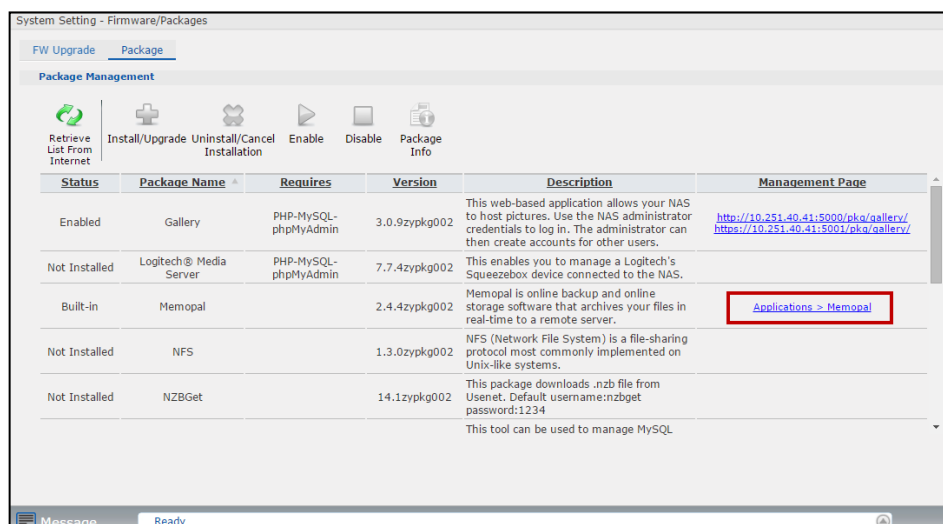
STEPS

- ✓ Log into the NAS using **NAS Starter Utility** or a **Web browser**.
- ✓ Click **System Setting > Firmware/Packages > Package**.
- ✓ Click **Retrieve List From Internet**, select the **Memopal package** from the table and then click the **Install/Upgrade** button.
- ✓ Click **Apply** to install the **Memopal** package.



8.2.2 Configuring Memopal on the NAS

- ✓ After installing and running Memopal, click **Applications > Memopal** to configure an account.
- ✓ Enter the registered Memopal **email account** and **password** in order to successfully authorize and link the NAS to the Memopal account.



Settings

☒ Enable Memopal

General Setting

Email

Password

☐ Limit File Size MB

- ✓ Regular file backup can be configured by clicking **Enable Schedule** and choosing how often the backup is initialized: **Weekly**, **Daily** in the range of 0 to 23 hours or **Hourly** in the range of 0 to 59 minutes. Select the **Share path** for the backup files.

Schedule Setting

☒ Enable Schedule

☐ Weekly

☒ Daily hours

☐ Hourly minutes

Backup Folder Setting

Share Name	Path	Actions
Memopal	/	

Share

Path

Note:
You must click "Apply" button to finish Backup Folder Setting.

- ✓ After successfully logging into Memopal, the data stored in the NAS are automatically synchronized to the user's storage space in Memopal.

Status

Status	Running
To Backup	2
Backed up	14
Failures	0
Upload Speed	0 B/s
Progress	<div><div></div></div> 87.50%

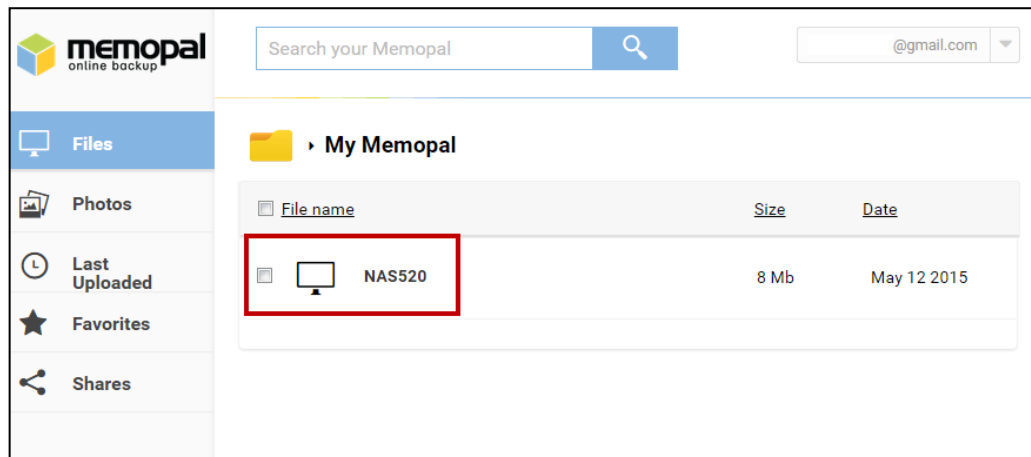
- ✓ All data are automatically synchronized to Memopal.

Status

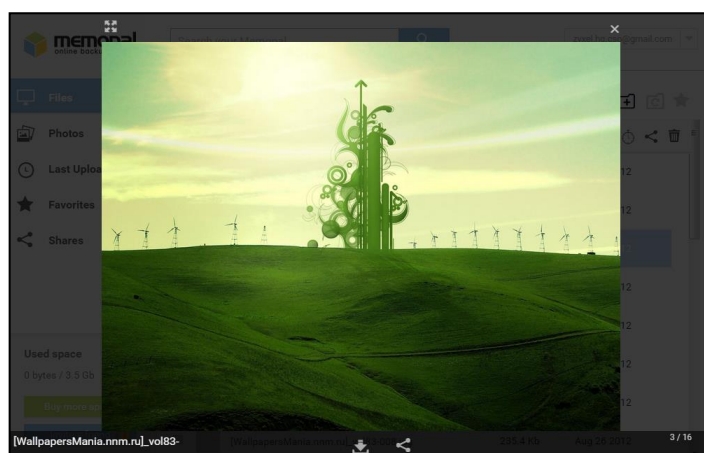
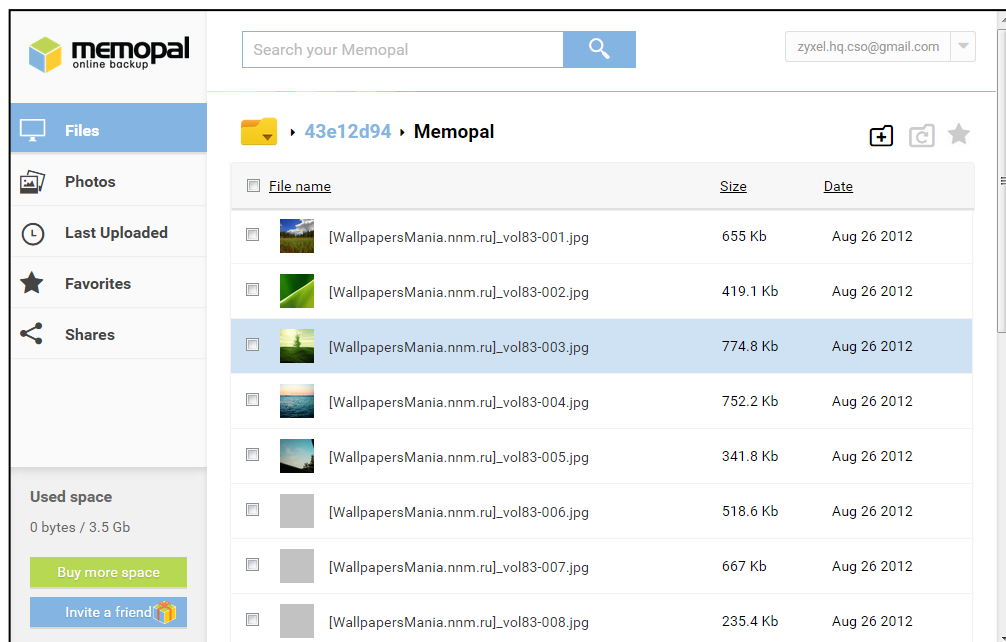
Status	Completed
To Backup	0
Backed up	16
Failures	0
Upload Speed	0 B/s
Progress	<div><div></div></div> 100.00%

8.2.3 Check the backup status on the Memopal website

- ✓ Go to the Memopal website (<http://www.memopal.com/>) to check the files that have just been stored as backup on the user's allotted cloud space.



- ✓ Go to the Memopal website (<http://www.memopal.com/>) and log in to check the files that have just been stored as backup on the user's allotted cloud space.



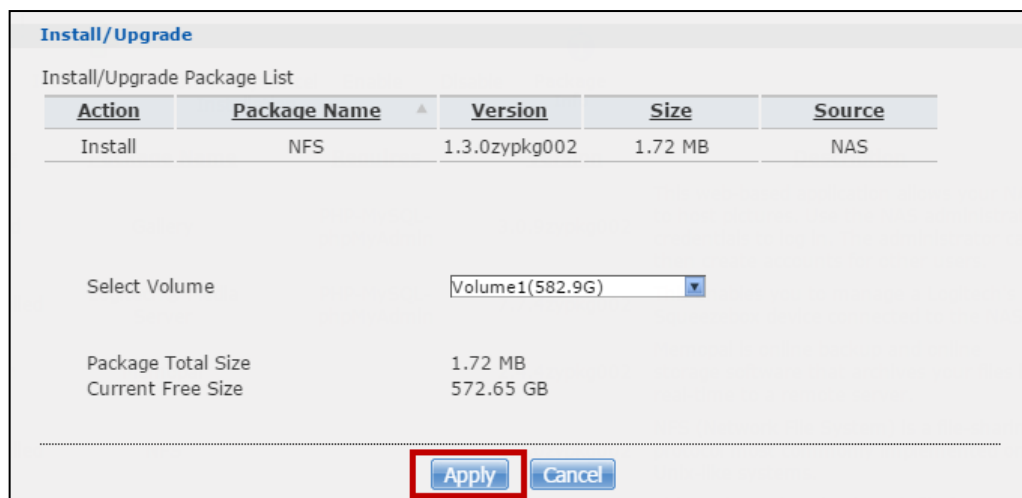
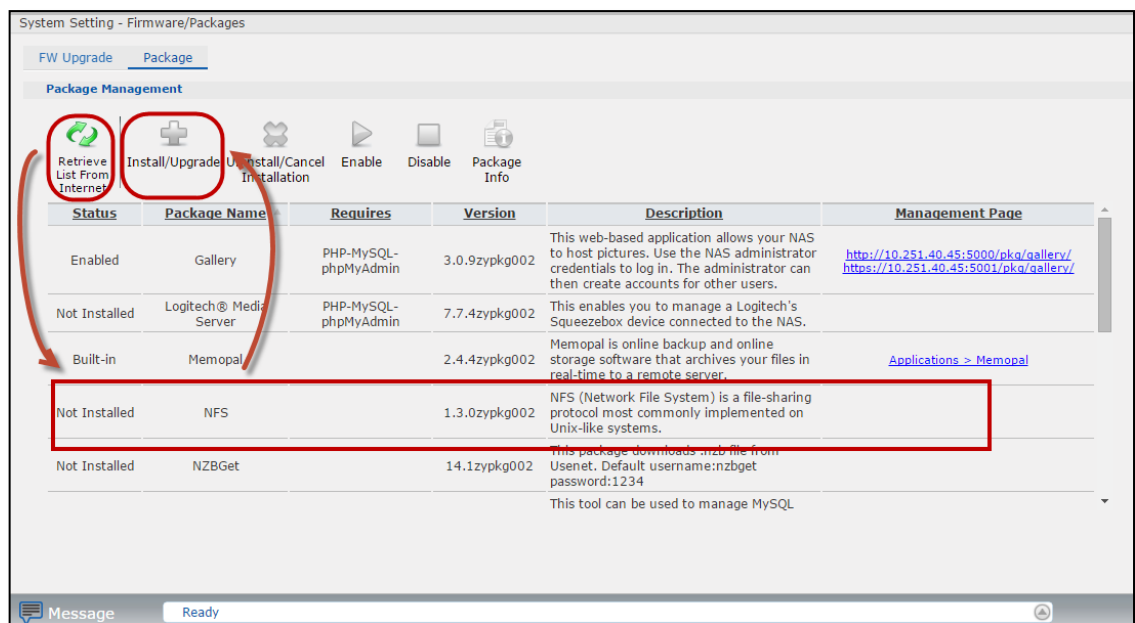
8.3 NFS

Network File System (NFS) is a distributed file system protocol, which allows a system to share directories and files with others over a network. By using NFS, users and programs can access files on remote systems almost as if they were local files.

8.3.1 Installing NFS from the Package Management

STEPS

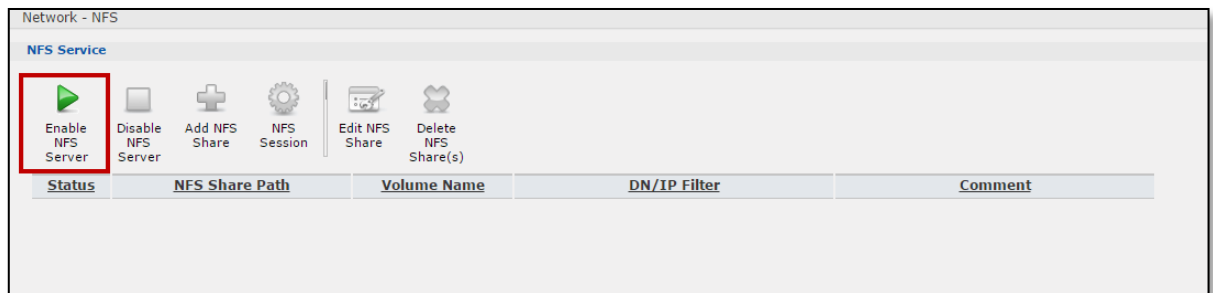
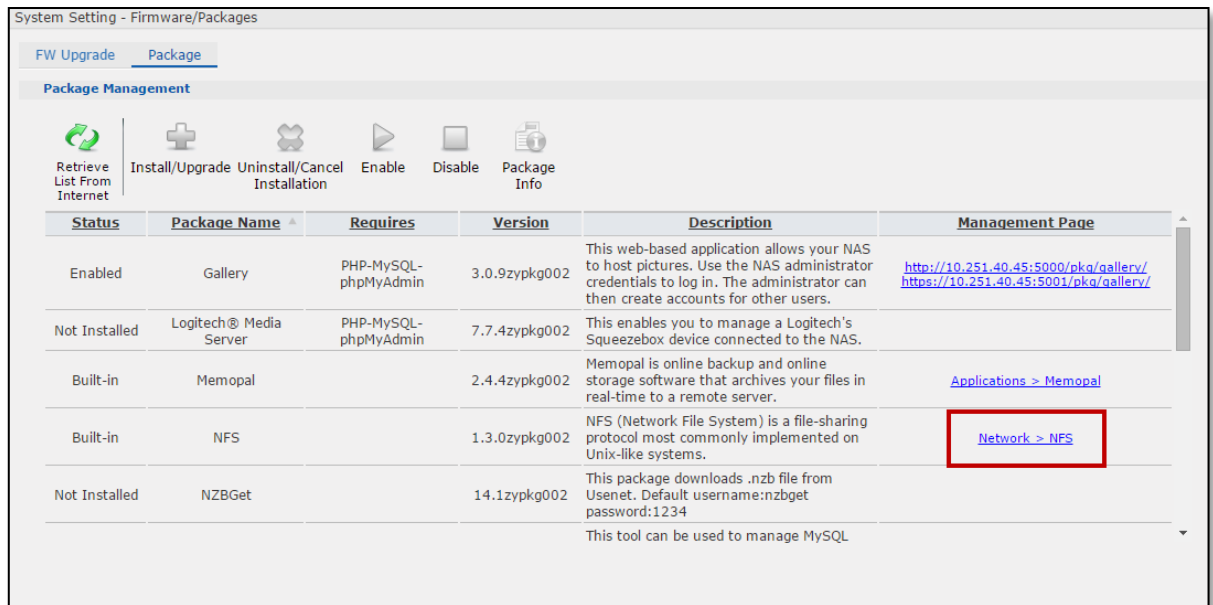
- ✓ Log into the NAS using **NAS Starter Utility** or a **Web browser**.
- ✓ Click **System Setting > Firmware/Packages > Package**.
- ✓ Click **Retrieve List From Internet**, select the **NFS package** from the table and then click the **Install/Upgrade** button.
- ✓ Click **Apply** to install the **NFS** package.



8.3.2 Enable NFS server on the NAS

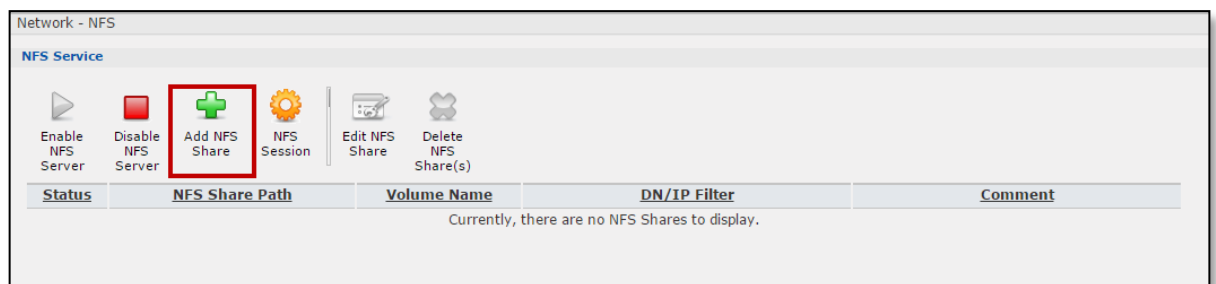
STEPS

- ✓ After installing NFS, click **Network > NFS** to enable the NFS server.



8.3.3 Configuring an NFS shared folder on the NAS

- ✓ Click **Add NFS Share** to configure an NFS folder.



- ✓ Enter an **NFS Share Name** and under **DN/IP Filter**, enter domain name(s) or IP address (es) which is/are allowed to read/write the NFS shares.

Add NFS Share

Volume Name: Volume1 (582.94 GB)

NFS Share Name: NFS

Full Path: /i-data/43e12d94/nfs/NFS

Comment:

DN/IP Filter: 10.251.40.0/24 Add

Read Only

Note:
You can input a domain name or IP in the filter. "*" character represent public. Ex: 172.23.26.0/24 or *.zyxel.com.tw

Apply Cancel

- ✓ The NFS shared folder has been added.

Network - NFS

NFS Service

Enable NFS Server
Disable NFS Server
Add NFS Share
NFS Session
Edit NFS Share
Delete NFS Share(s)

Status	NFS Share Path	Volume Name	DN/IP Filter
	/i-data/43e12d94/nfs/NFS	Volume1	10.251.40.0/24 (Read Only)

- ✓ Note: If users want to configure other features, do the following step:
Click **Edit NFS Share** to modify or delete an existing NFS share.

Network - NFS

NFS Service

Enable NFS Server
Disable NFS Server
Add NFS Share
NFS Session
Edit NFS Share
Delete NFS Share(s)

Status	NFS Share Path	Volume Name	DN/IP Filter
	/i-data/43e12d94/nfs/NFS	Volume1	10.251.40.0/24 (Read Only)

Network - NFS

NFS Service

Enable NFS Server
Disable NFS Server
Add NFS Share
NFS Session
Edit NFS Share
Delete NFS Share(s)

Status	NFS Share Path	Volume Name	DN/IP Filter
	/i-data/43e12d94/nfs/NFS	Volume1	10.251.40.0/24 (Read Only)

8.3.4 Enable the NFS service on Linux

- ✓ Enable the NFS service on Linux if your Linux is not built-in.

```
# /etc/init.d/rpcbind start
```

```
# /etc/init.d/nfslock start
```

```
[root@dhcppc16 ~]# /etc/init.d/rpcbind start
[root@dhcppc16 ~]# /etc/init.d/nfslock start
[root@dhcppc16 ~]# _
```

- ✓ Verify that the NFS server has exported the directory:

```
# showmount -e ServerName
```

```
root@ubuntu:/home# showmount -e 10.59.4.41
```

```
Export list for 10.59.4.41:
```

```
/i-data/43e12d94/nfs/NFS 10.59.4.0/24
```

8.3.5 Mount a Share of NAS NFS

- ✓ Create a mount point for the remote resources using the **mkdir** command.
- ✓ # mkdir NAS_mnt_test

```
root@ubuntu:~# ls
Desktop  Downloads  Pictures  Templates  USB2
Documents Music      Public    USB         Videos
root@ubuntu:~# mkdir NAS_mnt_test
root@ubuntu:~# ls
Desktop  Downloads  NAS_mnt_test  Public  USB  Videos
Documents Music      Pictures      Templates  USB2
root@ubuntu:~#
```

- ✓ Mount share of NAS:

```
# mount -t nfs ServerName:/remote/directory /local/directory
```

```
root@ubuntu:/home# mount -t nfs 10.59.4.41:/i-data/43e12d94/nfs/NFS /NAS_mnt_test
```

8.3.6 Check the connection of the NAS

- ✓ To check the amount of disk space for each mount you have:

```
#df
```

```
root@ubuntu:~# df

Filesystem                1K-blocks    Used   Available   Use%    Mounted on
/dev/sda1                  19478204  3560164  14921944    20%     /
none                       4          0         4          0%     /sys/fs/cgroup
```

udev	504924	4	504920	1%	/dev
tmpfs	102628	784	101844	1%	/run
none	5120	0	5120	0%	/run/lock
none	513136	156	512980	1%	/run/shm
none	102400	36	102364	1%	/run/user
10.59.4.41:/i-data/9fc30fc2/nfs/NFS 309637120 4512288 305124832 2% /NAS_mnt_test					

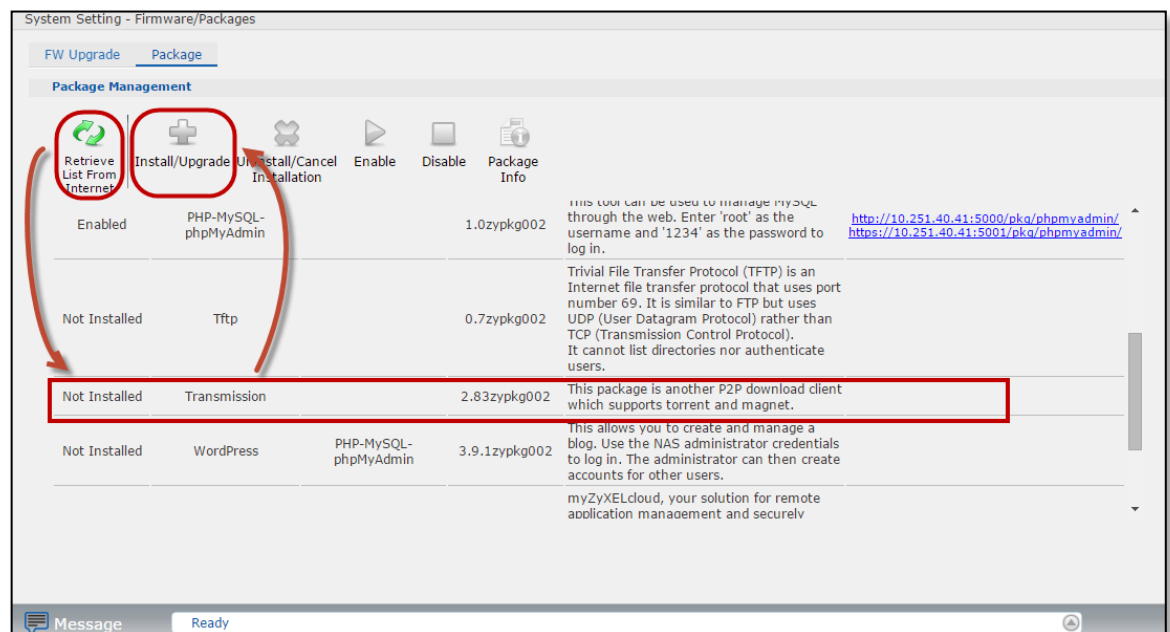
8.4 Transmission

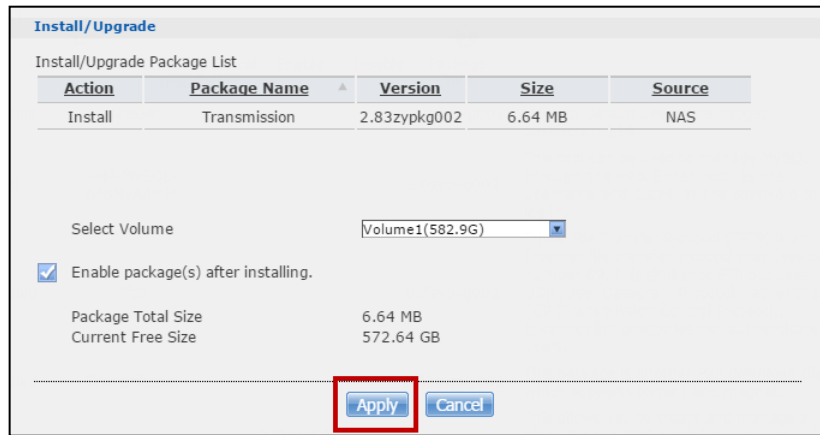
Transmission, which is a free software licensed under the terms of the GNU General Public License (GNU GPL), with parts under the MIT License, is a BitTorrent client which features a simple interface on top of a cross-platform back-end and allows users to download files from the Internet and upload their own files or torrents. By grabbing items and adding them to the interface, users can create queues of files to be downloaded and uploaded.

8.4.1 Installing Transmission from the Package Management

STEPS

- ✓ Log into the NAS using **NAS Starter Utility** or a **Web browser**.
- ✓ Click **System Setting > Firmware/Packages > Package**.
- ✓ Click **Retrieve List From Internet**, select the **Transmission** package from the table and then click the **Install/Upgrade** button.
- ✓ Click **Apply** to install the **Transmission** package.

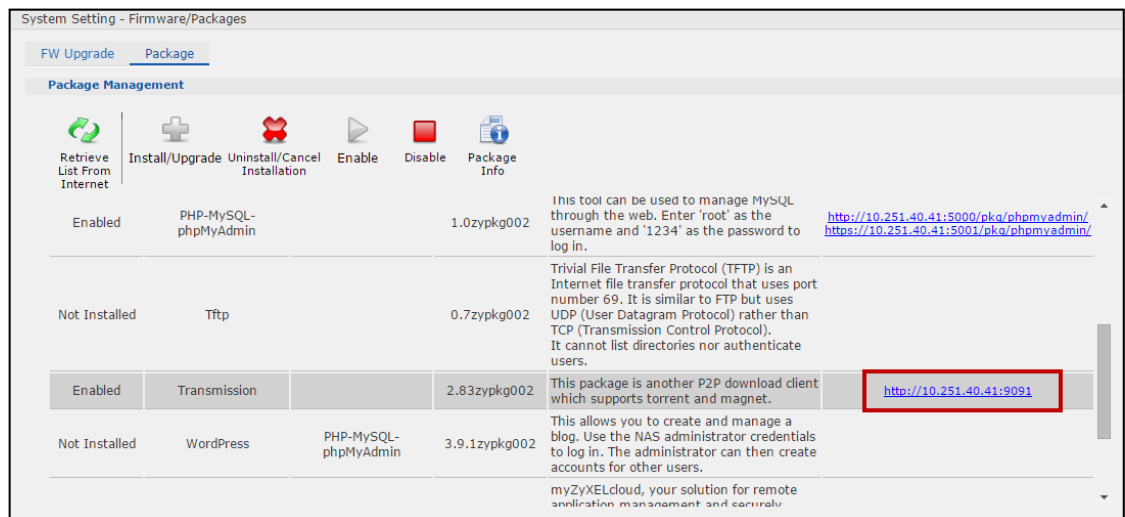




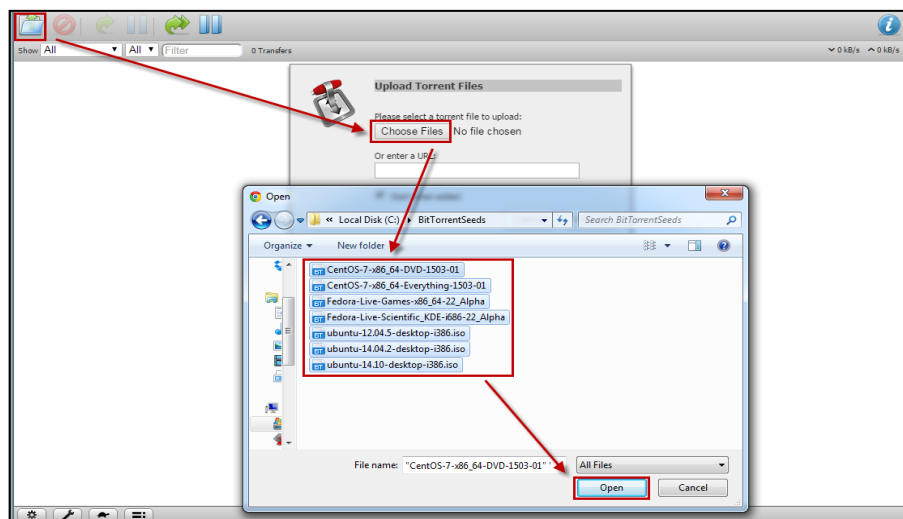
8.4.2 Configuring Transmission on the NAS

STEPS

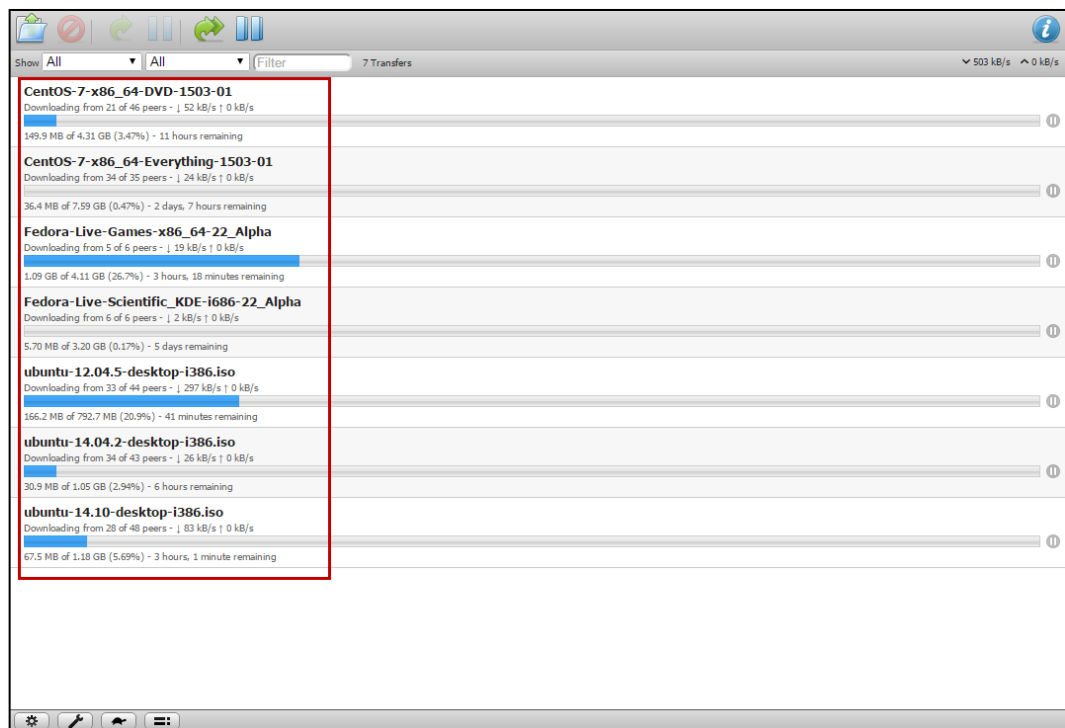
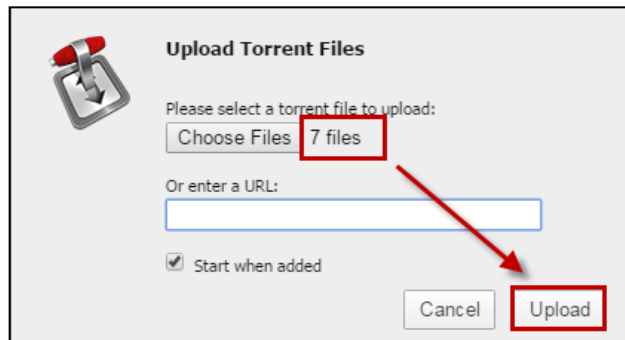
- ✓ After installing and running, click the link provided (for example, <http://10.251.40.31:9091>) to configure **Transmission**.



- ✓ Click **Open Torrents** found at the top-left corner of the screen, and then click **Choose Files** to upload torrent files.
- ✓ A dialog box displays, which lets users select torrent files. Click **Open** after the files have been selected.

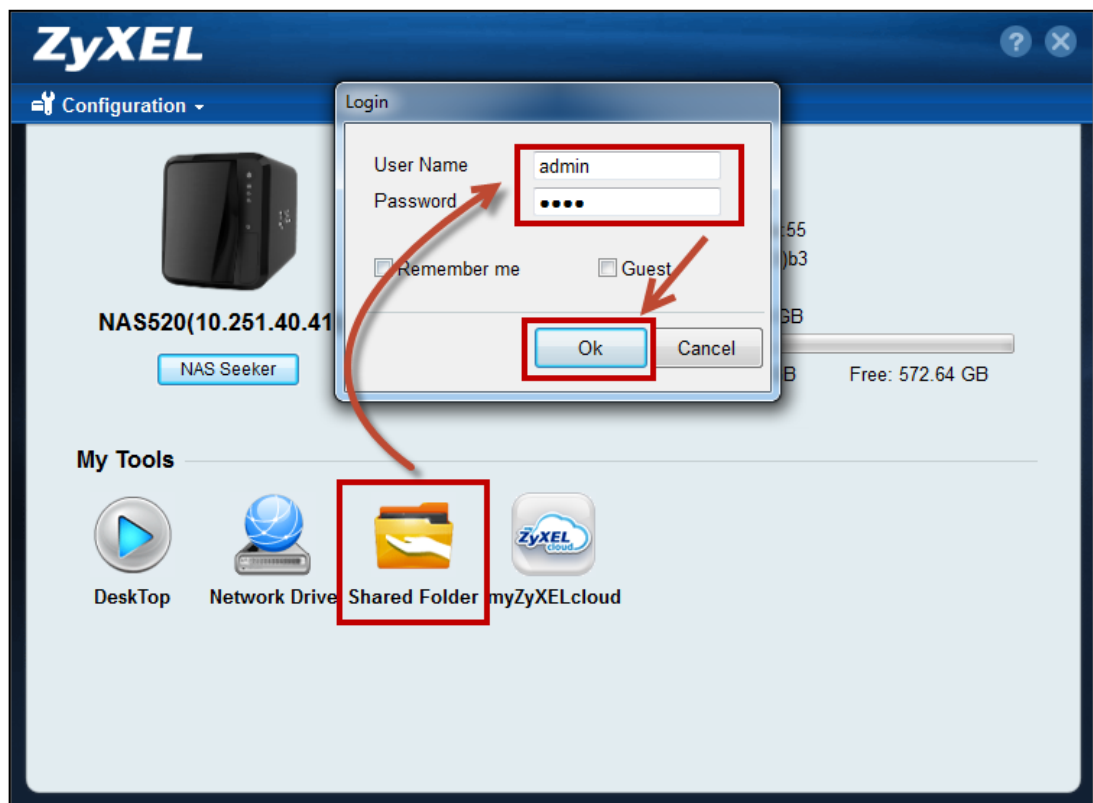
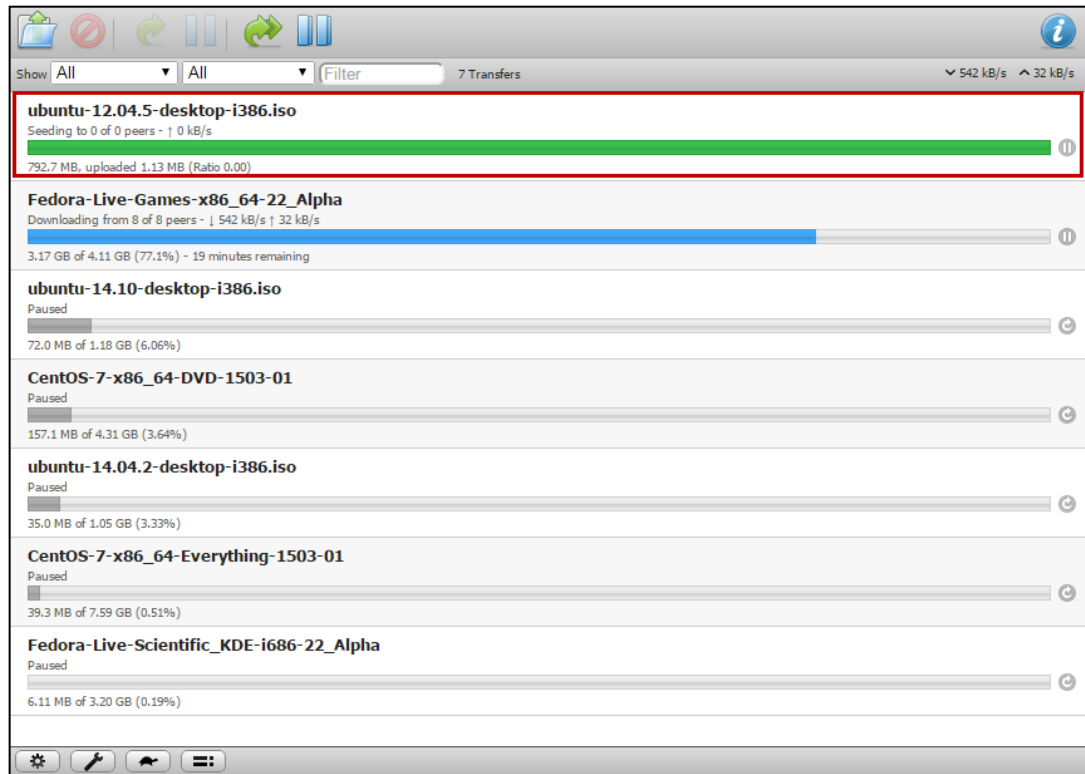


- ✓ The number of chosen torrent files is displayed on the **Upload Torrent Files** window. Simply click the **Upload** button to upload all the files.
- ✓ All the chosen torrent files will be listed in the **Main** Transmission screen after they have been uploaded. The files are available for download immediately.

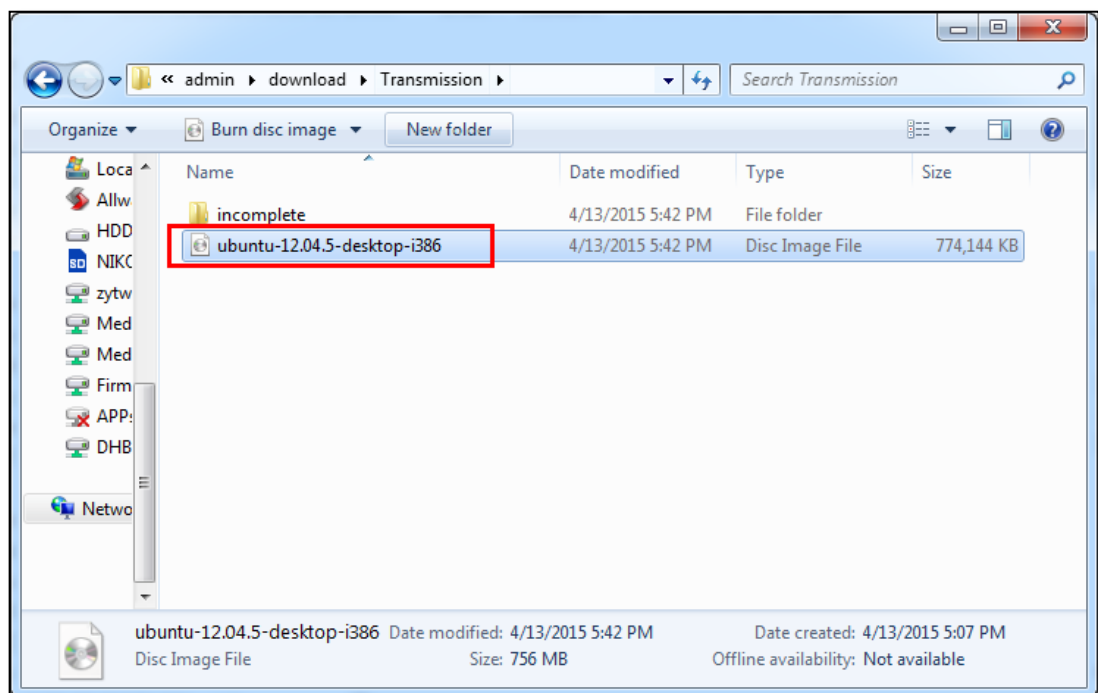
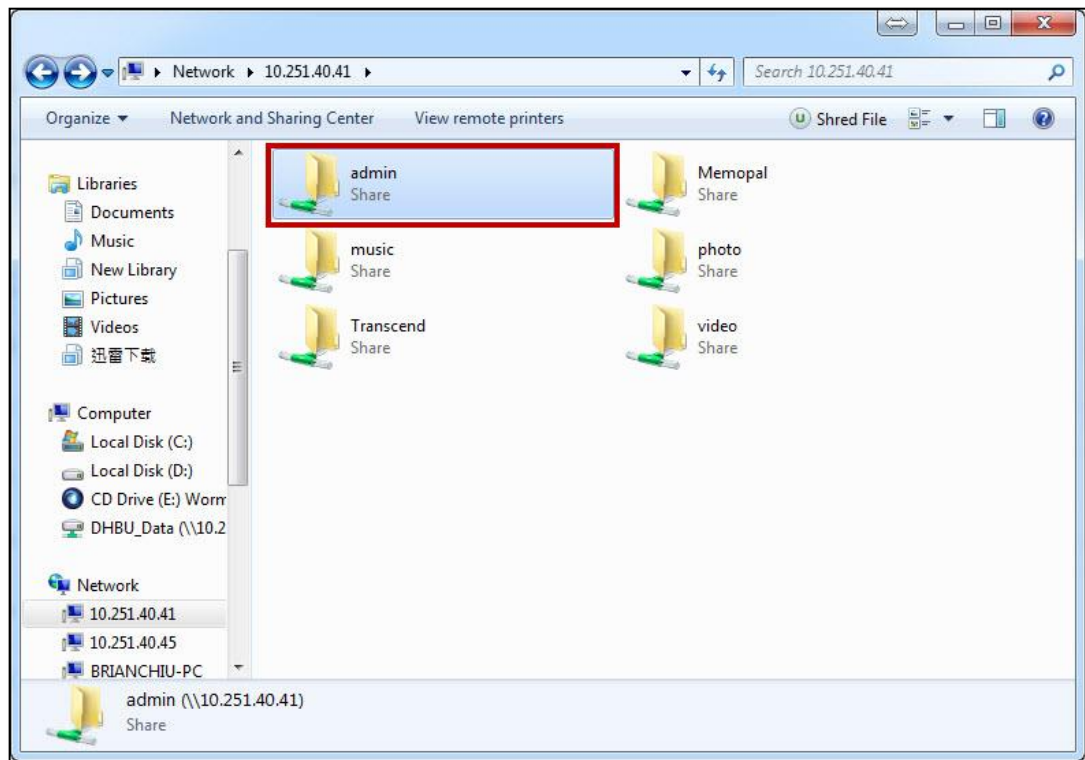


8.4.3 Check the download status of Transmission on the NAS

- ✓ After download is complete, the progress bar changes color from blue to green.
- ✓ In order to get the actual downloaded file, open the **NAS Starter Utility** and click **Shared Folder**. Enter the **User Name** and **Password** to get access to the folder.



- ✓ After logging into the storage, users can see all the shared folders as well as the default storage folder of **Transmission**, which can be found in the **admin** shared folder.
- ✓ After the download is complete, users can find the files stored on the NAS. The default location for downloaded files is **admin > download > Transmission**.



8.5 WordPress

WordPress started as just a blogging system, but has evolved to be used as full content management system and so much more through the thousands of plugins and widgets and themes to build beautiful websites. With WordPress, there really are no limits!

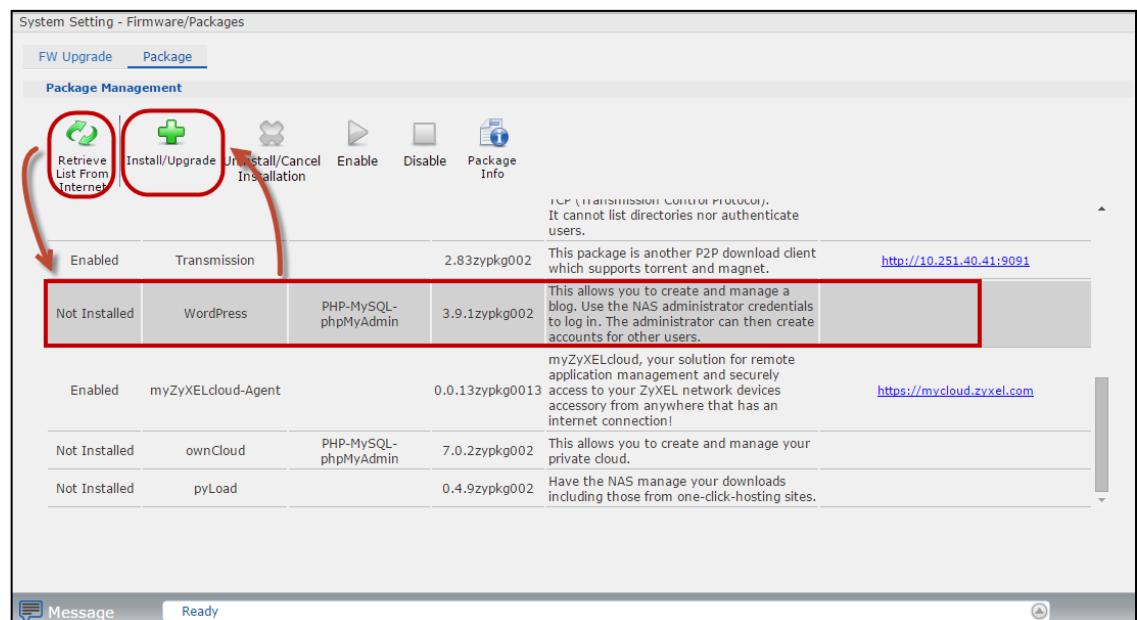
WordPress is an Open Source project, which means there are hundreds of people all over the world working on it. (More than most commercial platforms.) It also means users are free to use it for anything from a cat's home page to a Fortune 500 web site without paying anyone a license fee and a number of other important freedoms.

Refer to the official website of WordPress to know more about its features:
<https://wordpress.org/about/features/>

8.5.1 Installing WordPress from the Package Management

STEPS

- ✓ Log into the NAS using **NAS Starter Utility** or a **Web browser**.
- ✓ Click **System Setting > Firmware/Packages > Package**.
- ✓ Click **Retrieve List From Internet**, select the **WordPress package** from the table and then click the **Install/Upgrade** button.
- ✓ Click **Apply** to install the **WordPress** package.



Install/Upgrade

Install/Upgrade Package List

Action	Package Name	Version	Size	Source
Install	WordPress	3.9.1zypkg002	29.22 MB	NAS

Select Volume Volume1(582.9G)

☒ Enable package(s) after installing.

Package Total Size 58.44 MB

Current Free Size

Apply **Cancel**

8.5.2 Using WordPress on the NAS

STEPS

- ✓ After installing and running WordPress, click the link associated with it to configure an account.

System Setting - Firmware/Packages

FW Upgrade Package

Package Management

TCP (Transmission Control Protocol). It cannot list directories nor authenticate users.

Enabled	Transmission		2.83zypkg002	This package is another P2P download client which supports torrent and magnet.	http://10.251.40.41:9091
Enabled	WordPress	PHP-MySQL-phpMyAdmin	3.9.1zypkg002	This allows you to create and manage a blog. Use the NAS administrator credentials to log in. The administrator can then create accounts for other users.	http://10.251.40.41:5000/pkg/WordPress/ https://10.251.40.41:5001/pkg/WordPress/
Enabled	myZyXELcloud-Agent		0.0.13zypkg0013	myZyXELcloud, your solution for remote application management and securely access to your ZyXEL network devices accessory from anywhere that has an internet connection!	https://mycloud.zyxel.com
Not Installed	ownCloud	PHP-MySQL-phpMyAdmin	7.0.2zypkg002	This allows you to create and manage your private cloud.	
Not Installed	pyLoad		0.4.9zypkg002	Have the NAS manage your downloads including those from one-click-hosting sites.	

Message Ready

- ✓ Enter the required information such as **Site Title**, **Username**, **Password** and **Email**.

Information needed

Please provide the following information. Don't worry, you can always change these settings later.

Site Title

Username
Usernames can have only alphanumeric characters, spaces, underscores, hyphens, periods and the @ symbol.

Password, twice
A password will be automatically generated for you if you leave this blank.


Medium

Hint: The password should be at least seven characters long. To make it stronger, use upper and lower case letters, numbers, and symbols like ! " ? \$ % ^ &).

Your E-mail
Double-check your email address before continuing.

Privacy ☒ Allow search engines to index this site.

- ✓ Click the **Install WordPress** button. A screen displays to show that the installation was a success.

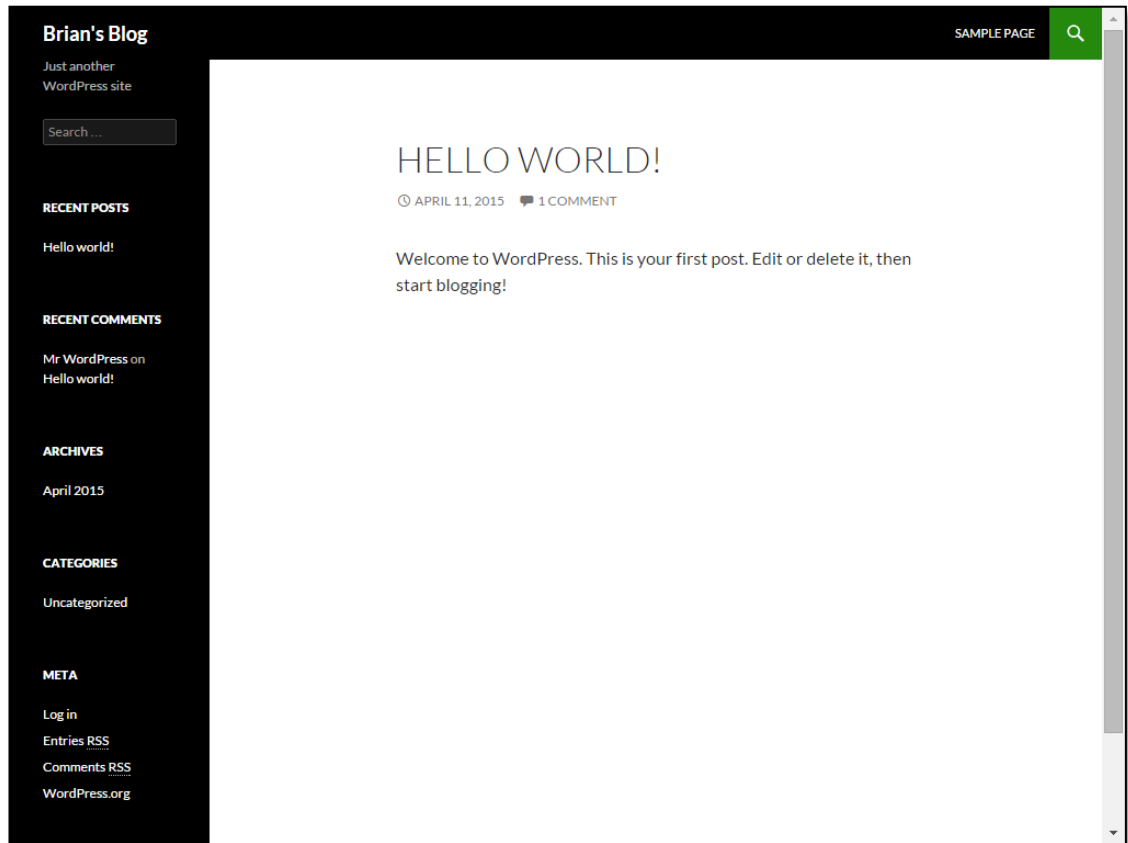


Success!

WordPress has been installed. Were you expecting more steps? Sorry to disappoint.

Username Brian

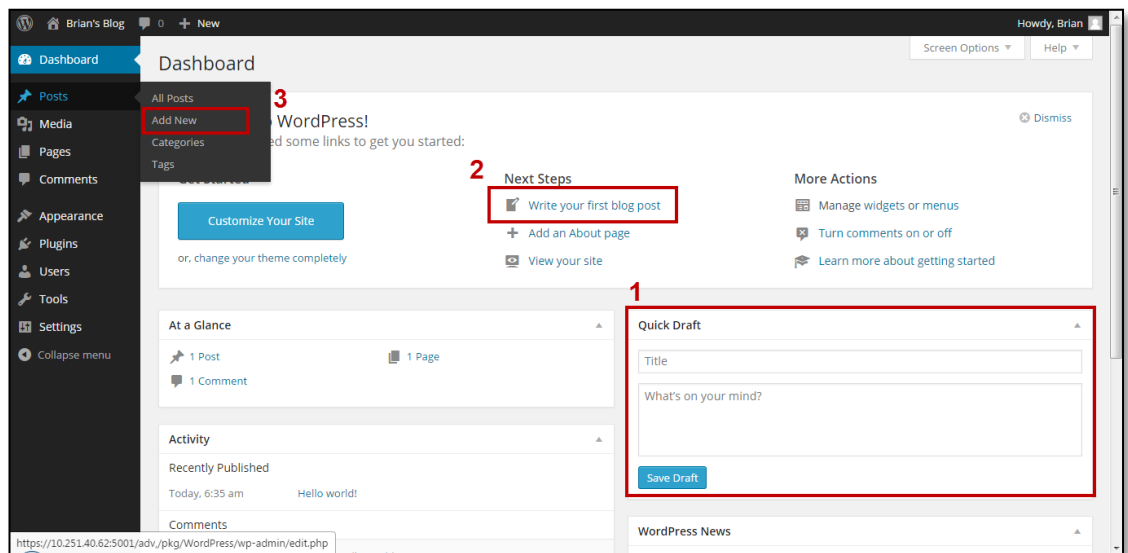
Password *Your chosen password.*

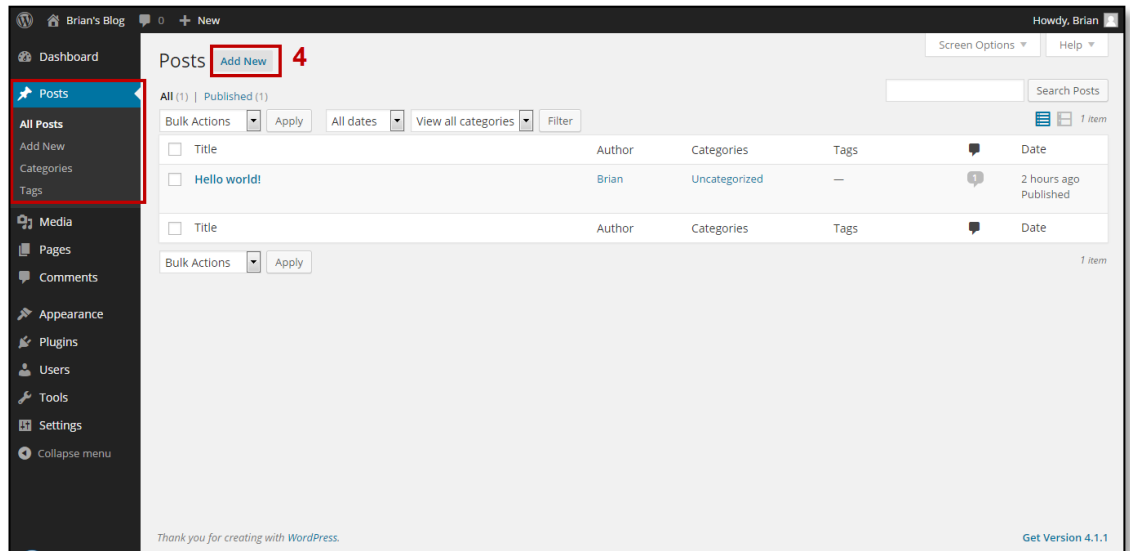


8.5.3 How to add a new post on WordPress

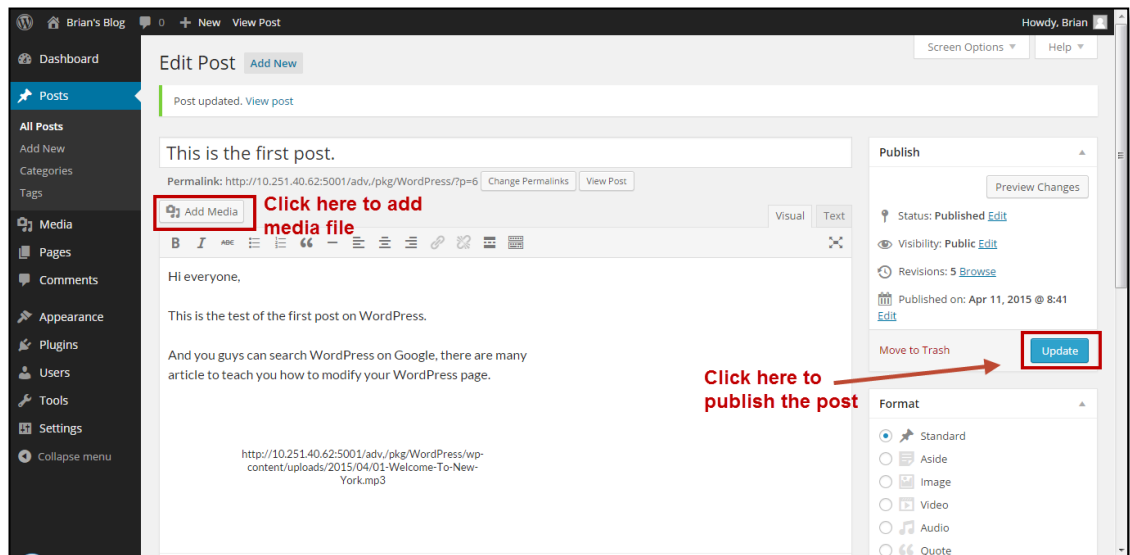
STEPS

- ✓ There are many different ways for a user to add a new post.

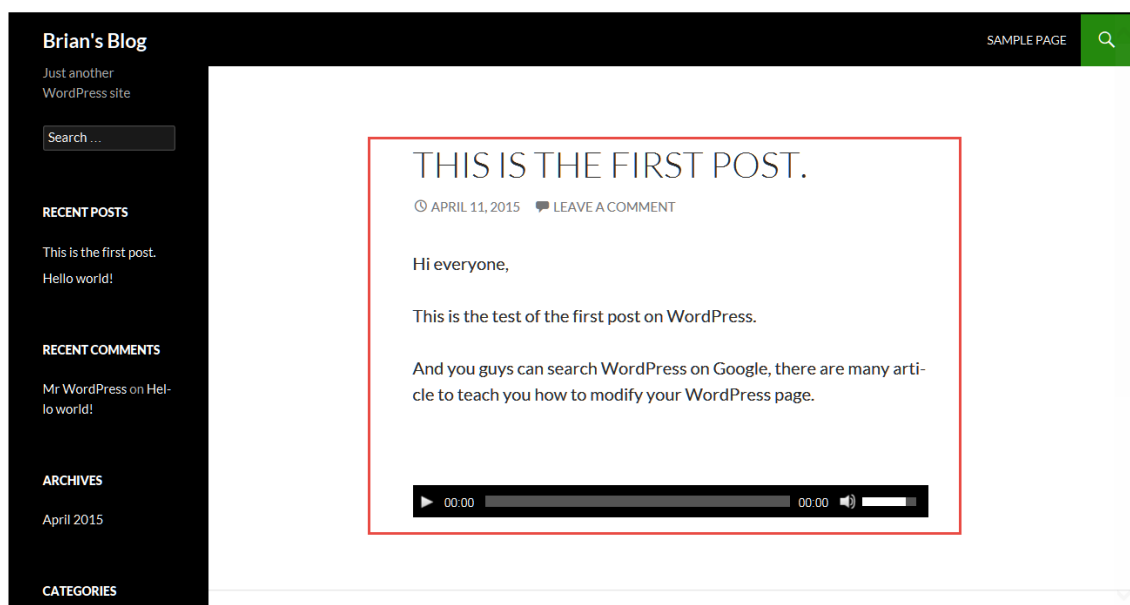




- ✓ A user can enter any title, as well as add media files and text to the content body.



- ✓ After clicking the **Publish** button, users can see the post in the main page.



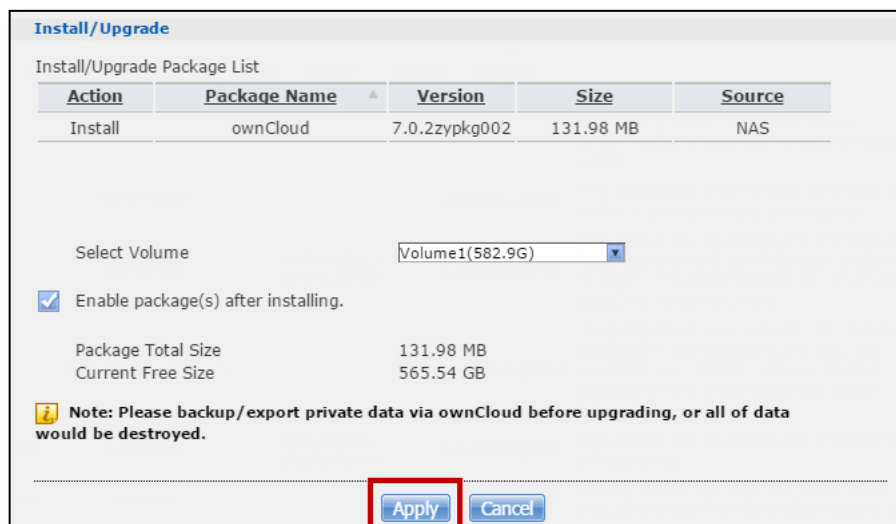
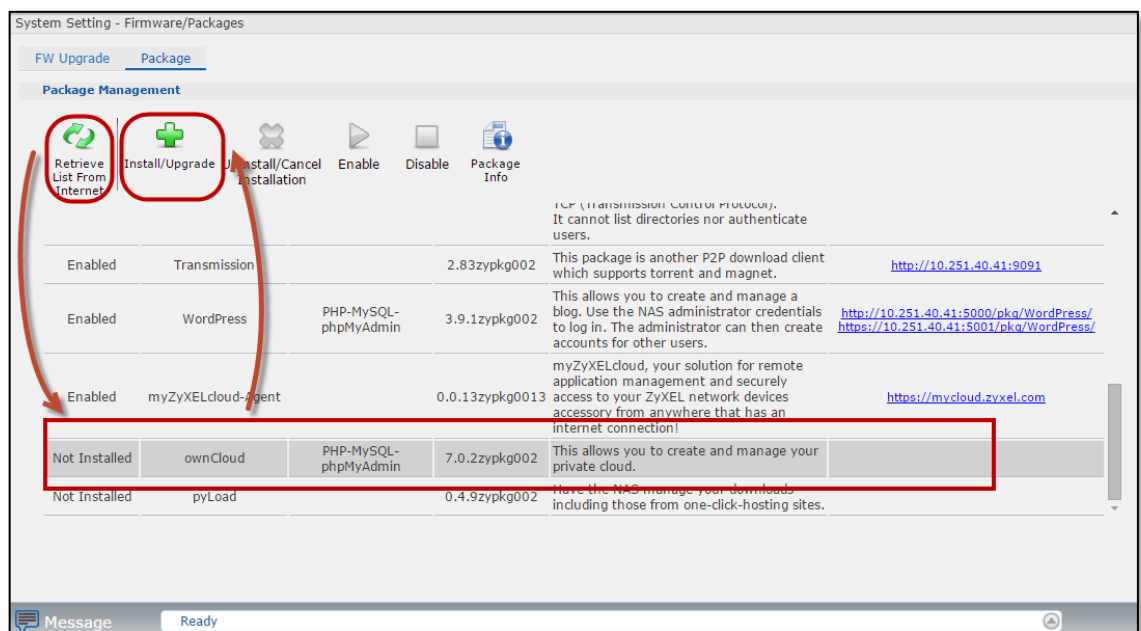
8.6 ownCloud

ownCloud is file sync and share that is hosted in a data center, on servers, or using a user's storage. ownCloud provides Universal File Access through a single front-end to all disparate systems. Users can access company files on any device, anytime, from anywhere while IT can manage, control and audit file sharing activity to ensure security and compliance measures are met.

8.6.1 Installing ownCloud from the Package Management

STEPS

- ✓ Log into the NAS using **NAS Starter Utility** or a **Web browser**.
- ✓ Click **System Setting > Firmware/Packages > Package**.
- ✓ Click **Retrieve List From Internet**, select the **ownCloud** package from the table and then click the **Install/Upgrade** button.
- ✓ Click **Apply** to install the **ownCloud** package.
- ✓ From the drop-down menu, select a data path for the backup and click **Create**.



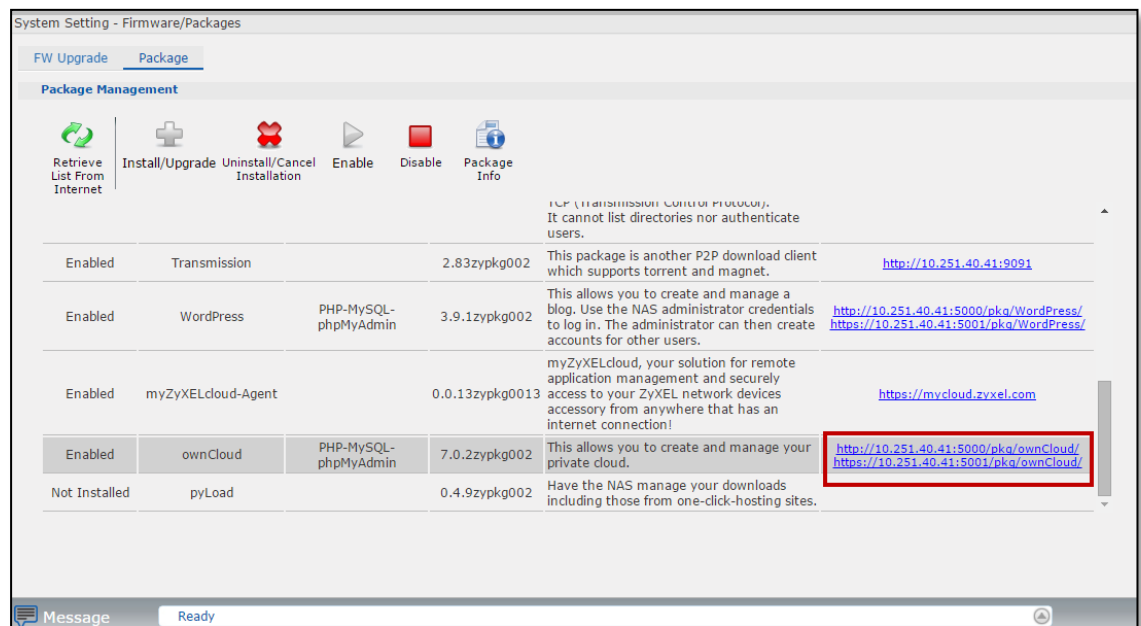


The 'Data Path Setting' dialog box shows the 'Package Name' as 'ownCloud' and the 'Selected Data Path' as 'public'. A red box highlights the 'public' dropdown menu, with a red '1.' next to it. Another red box highlights the 'Create' button, with a red '2.' next to it. A 'Cancel' button is also visible.

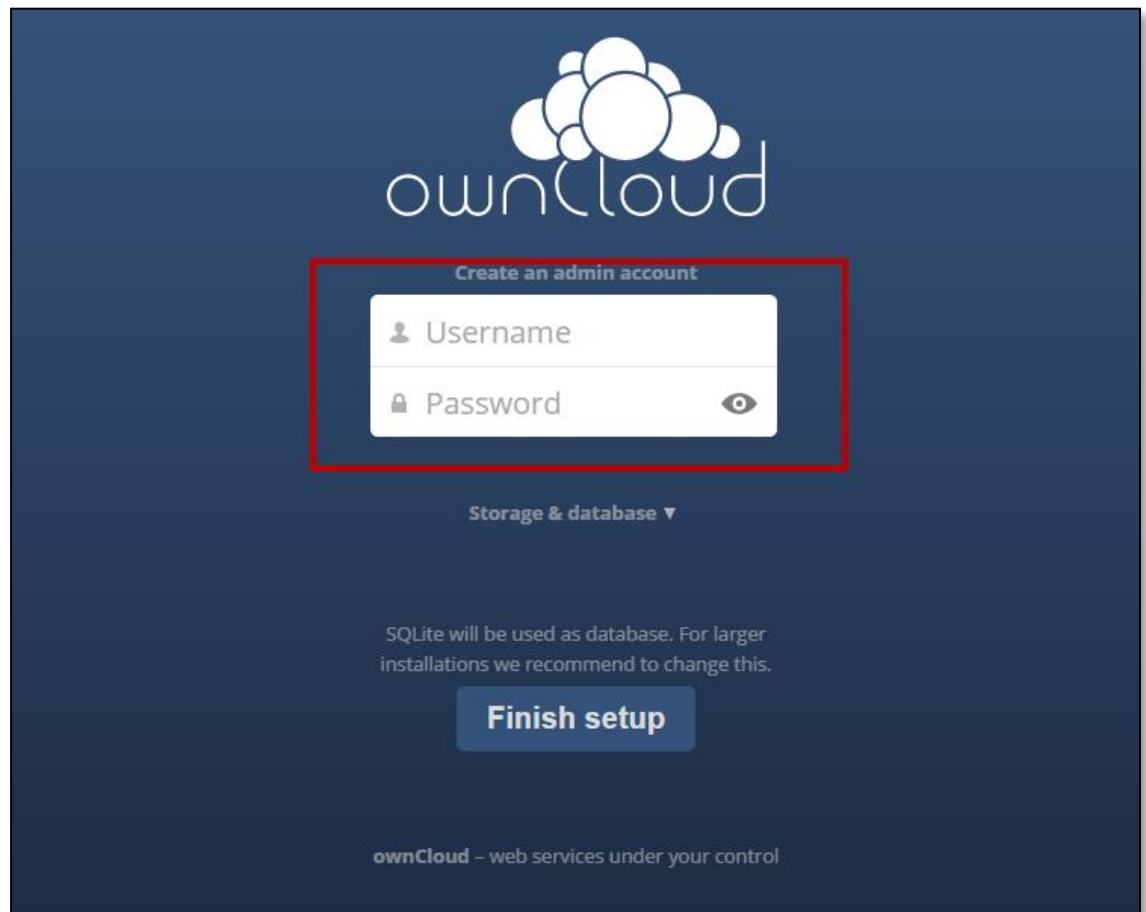
8.6.2 Configuring ownCloud on the NAS

STEPS

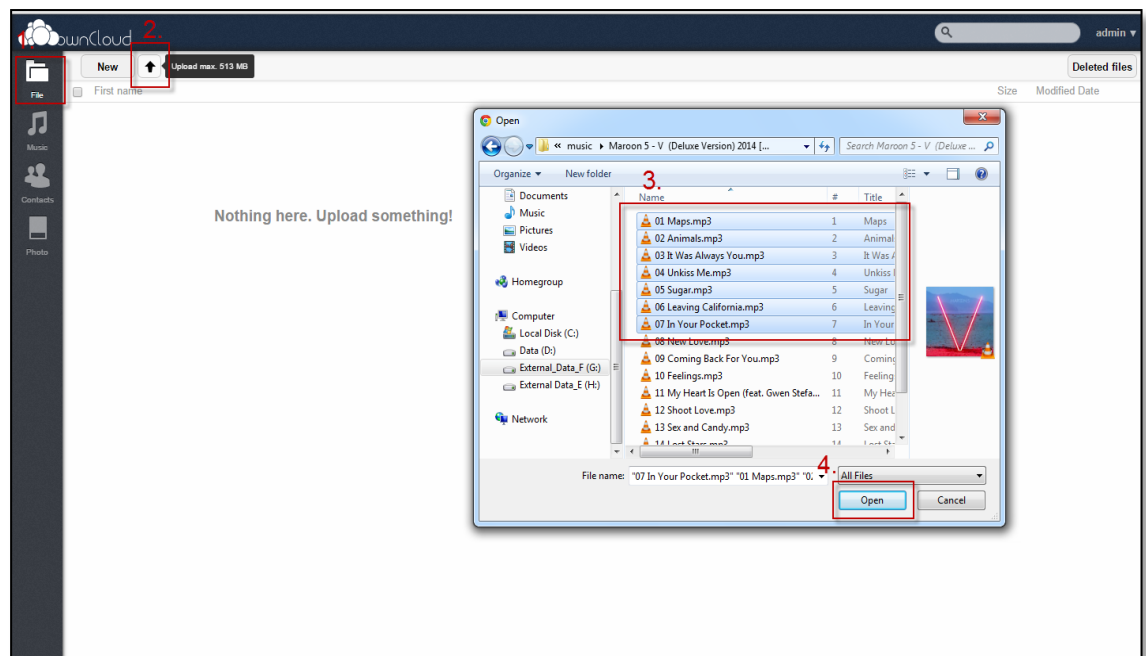
- ✓ After installing and running ownCloud, click **Application > ownCloud** to configure an account.



- ✓ After clicking the provided ownCloud link, log into the ownCloud page create an account with admin permission on the NAS.

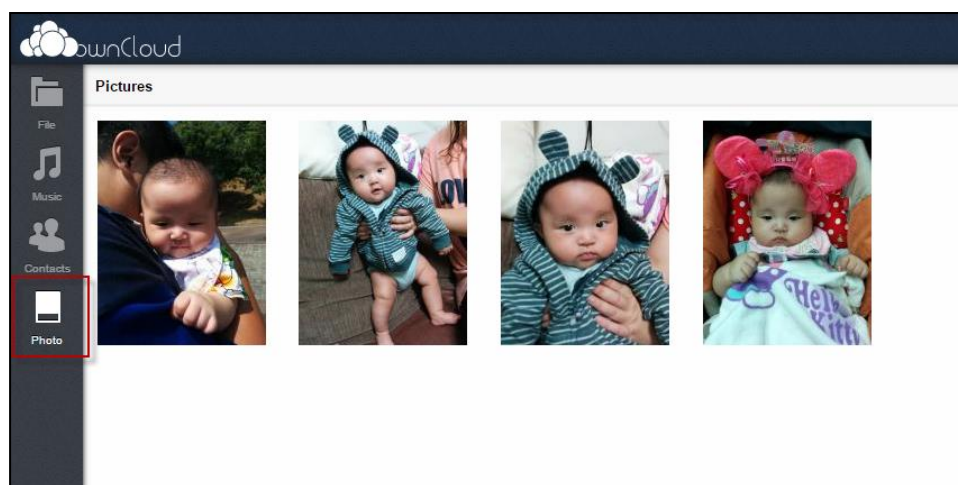


- ✓ Once login is successful, click **File** to upload files to the NAS.



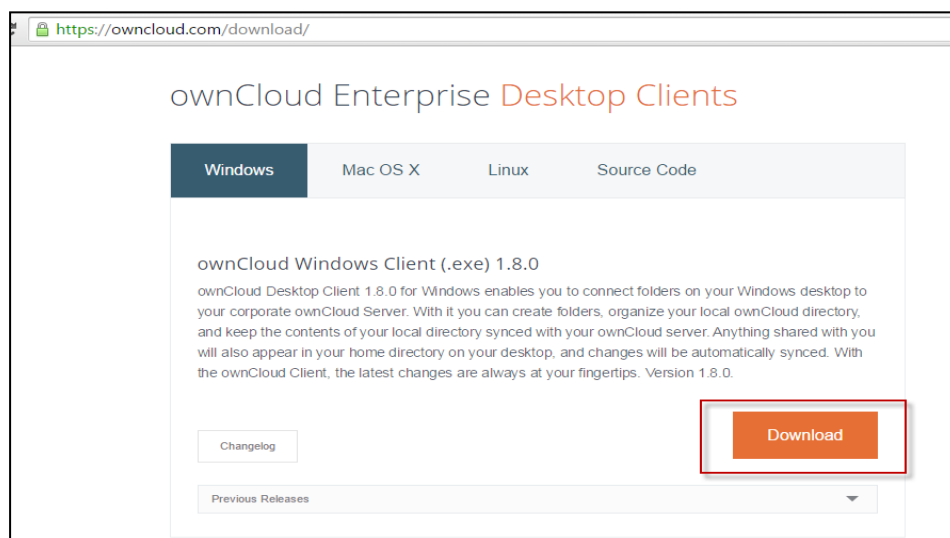


- ✓ Click **Photo** to check the images uploaded via ownCloud.

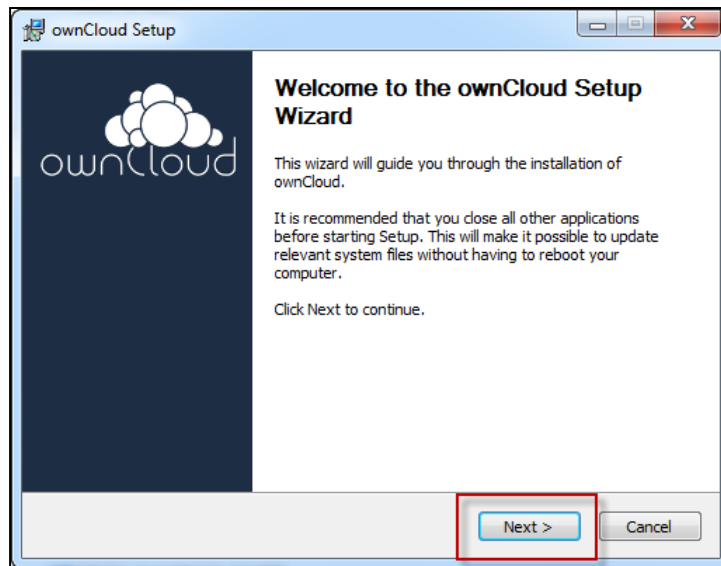


8.6.3 Back Up Files from a PC to the NAS

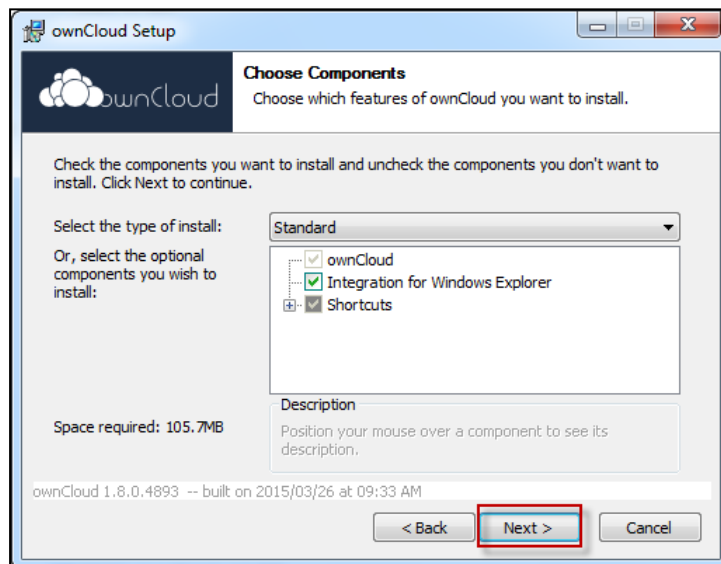
- ✓ Go to the ownCloud website and download the ownCloud client. The following figure shows the Windows version of the client.



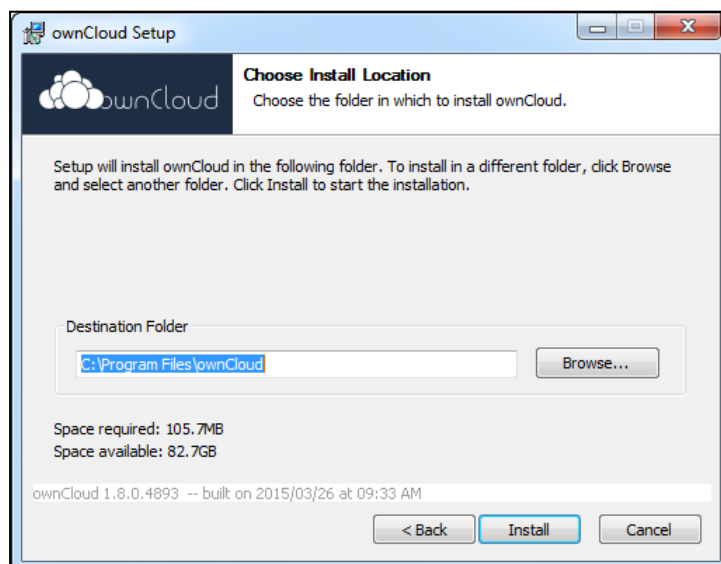
- ✓ Start installing the ownCloud client on the PC.

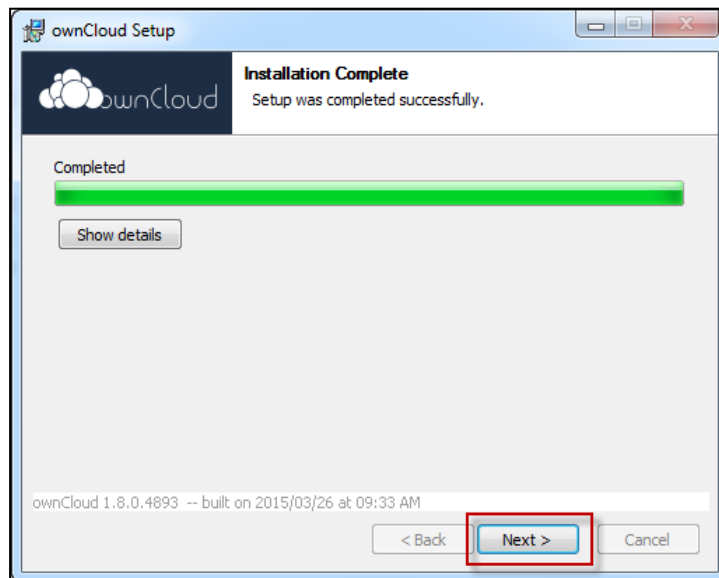


- ✓ Select which features of ownCloud to install.

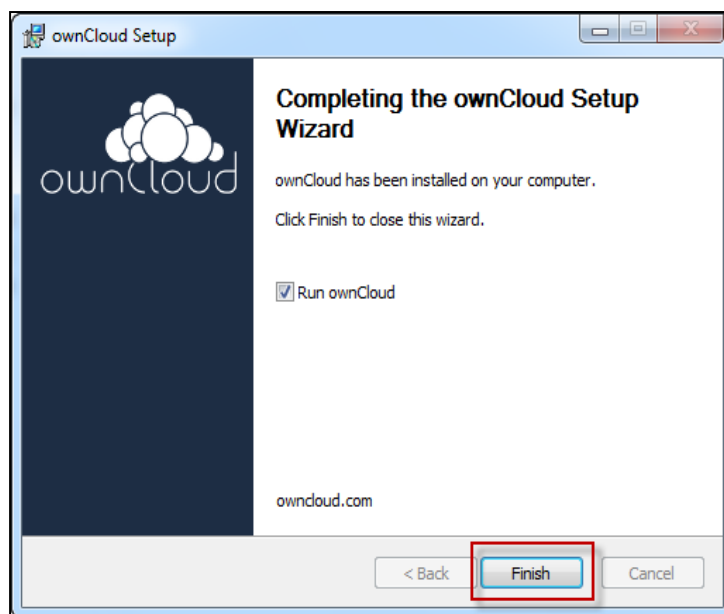


- ✓ Choose the folder where the ownCloud client will be installed.

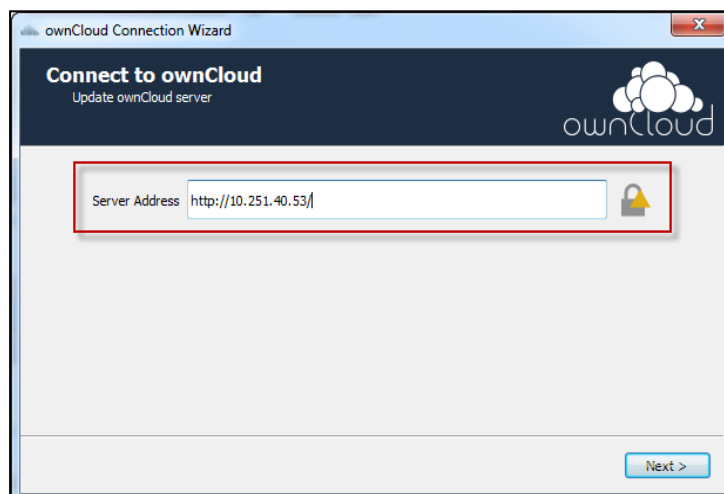




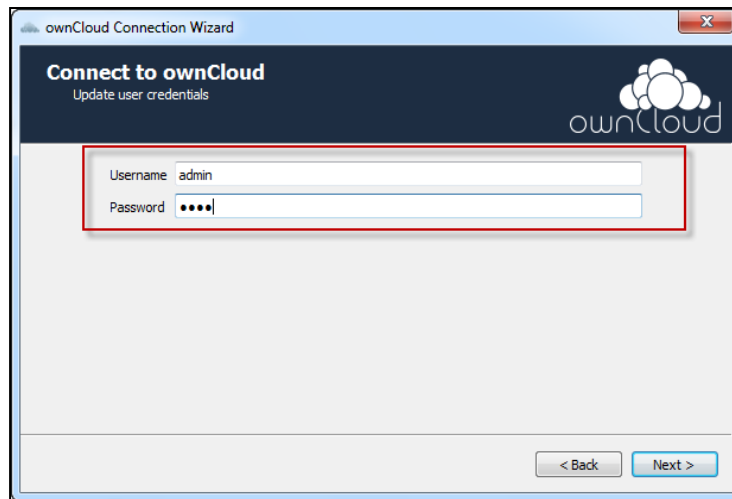
- ✓ The ownCloud client has been installed on the PC.



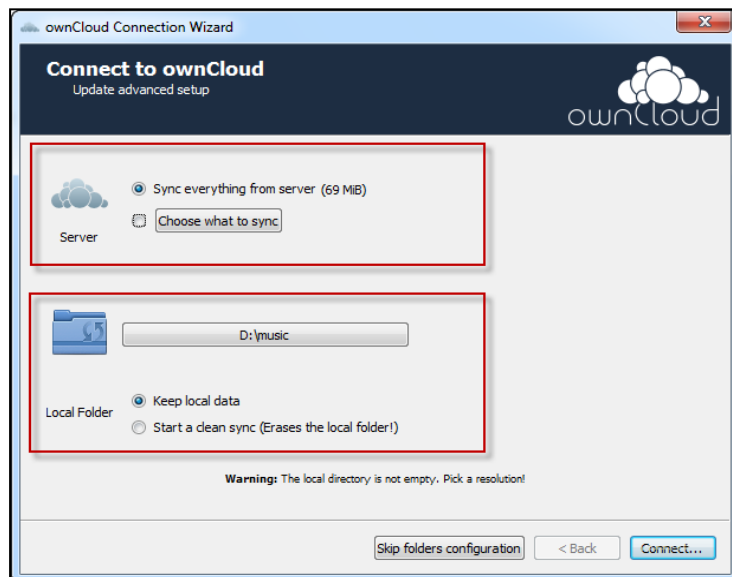
- ✓ Run the ownCloud client and set the **Server Address** to that of the NAS.



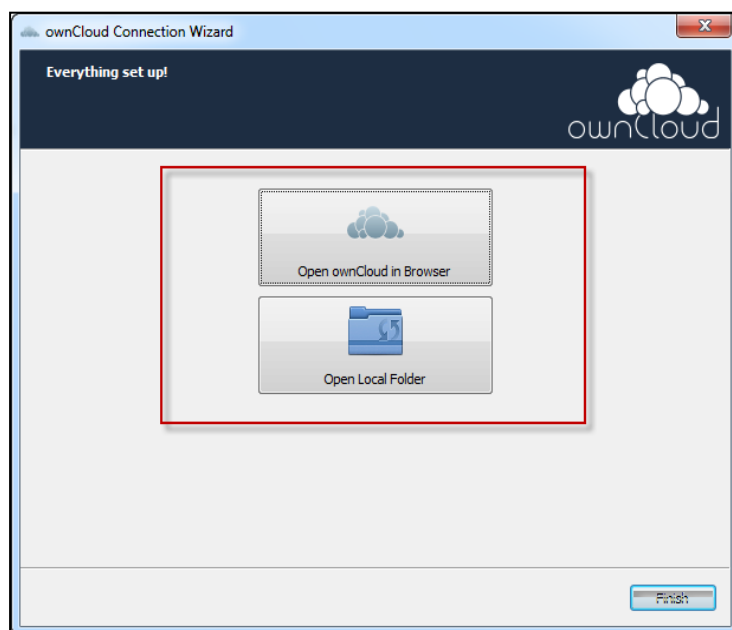
- ✓ Enter the **Username** and **Password** of the NAS



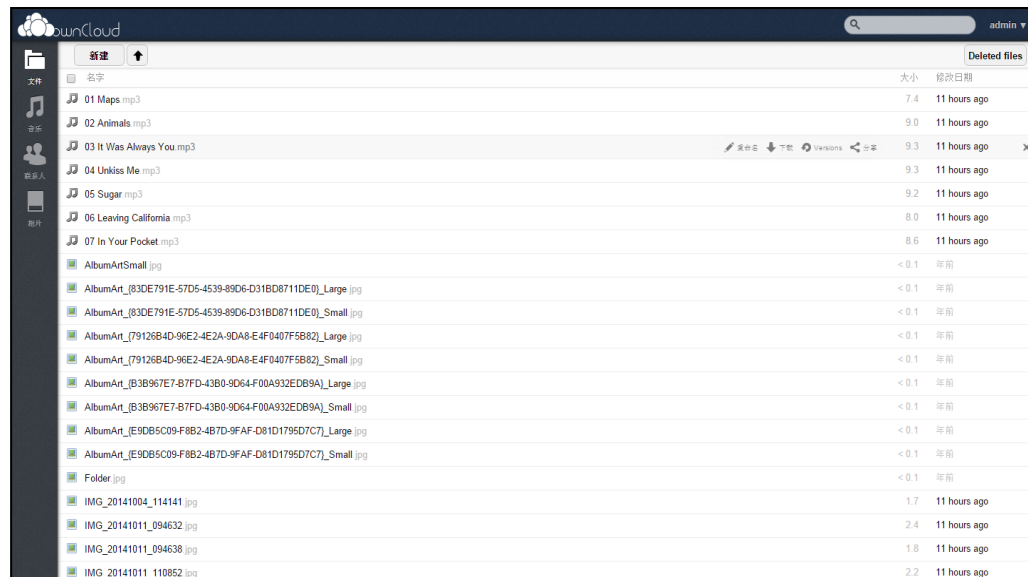
- ✓ Select the file types to be synced from the **Server** and **Local Folder**.



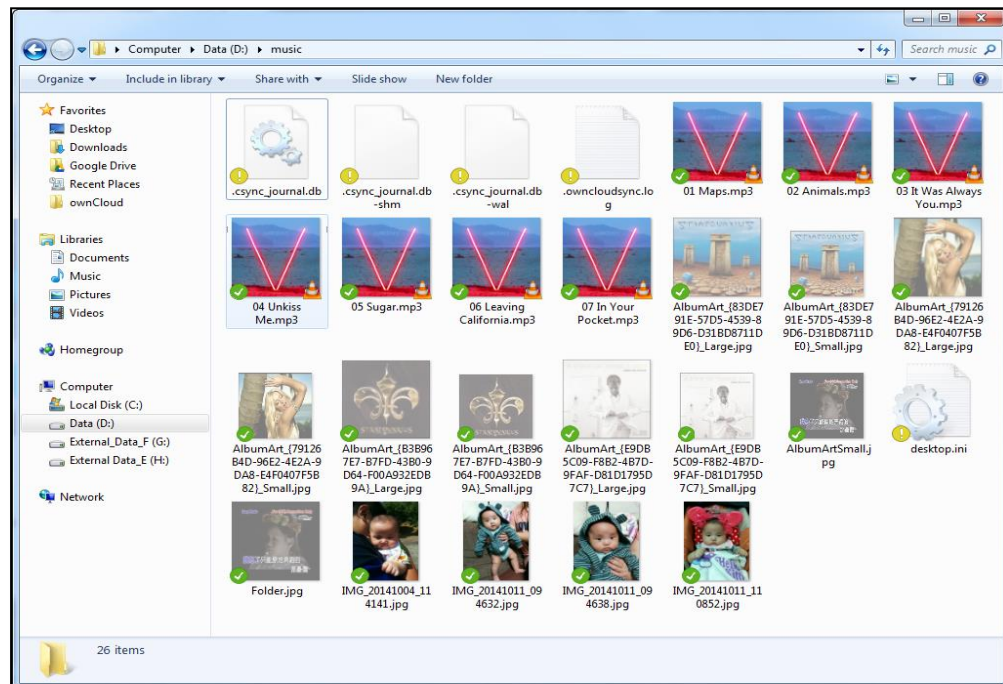
- ✓ Set up is finished.



- ✓ Check the files via the ownCloud page of the NAS after syncing.



- ✓ Check the files in the local folder of the PC after syncing.



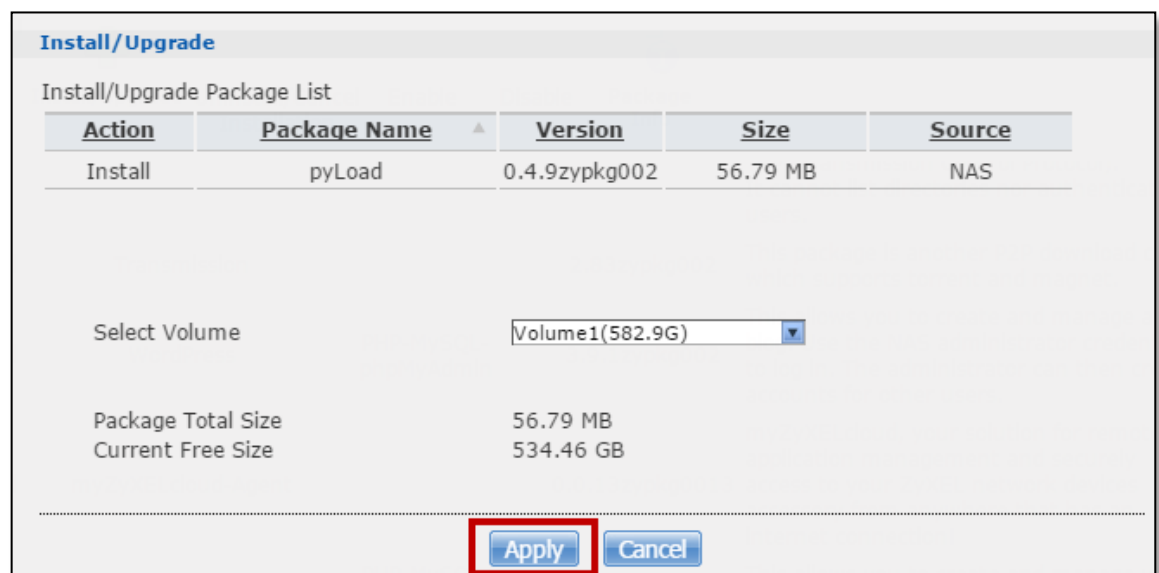
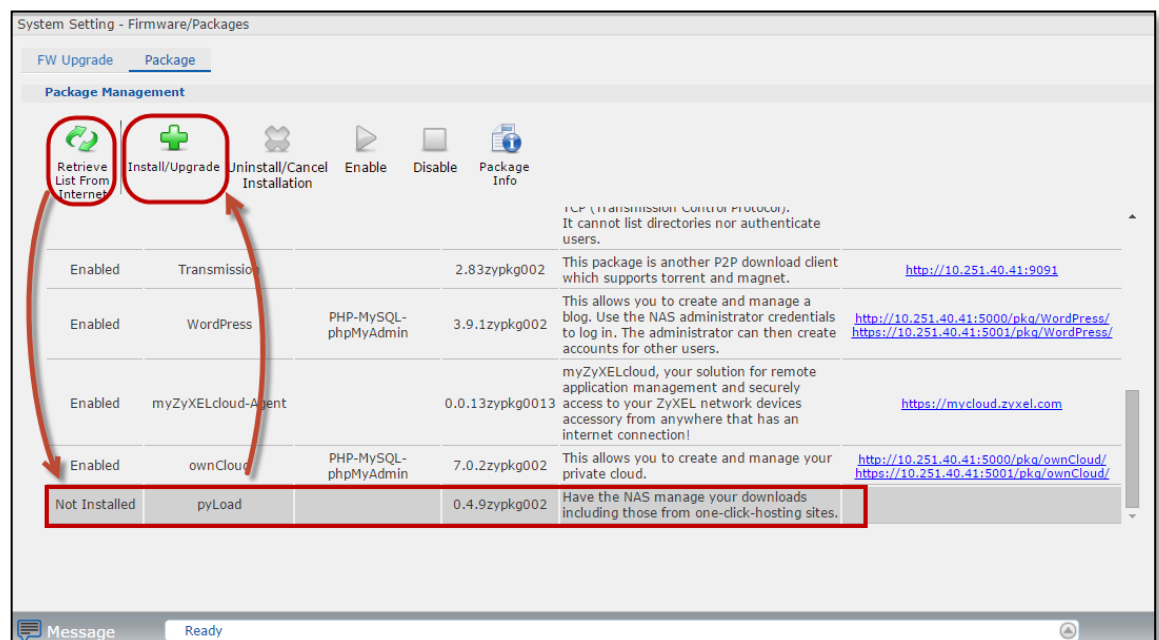
8.7 pyLoad

pyLoad is a fast, lightweight and full featured download manager for many One-Click Hosters, container formats like DLC, video sites or just plain http/ftp links. It aims for low hardware requirements and platform independence to be runnable on all kinds of systems (desktop PC, netbook, NAS, router).

8.7.1 Installing pyLoad from the Package Management

STEPS

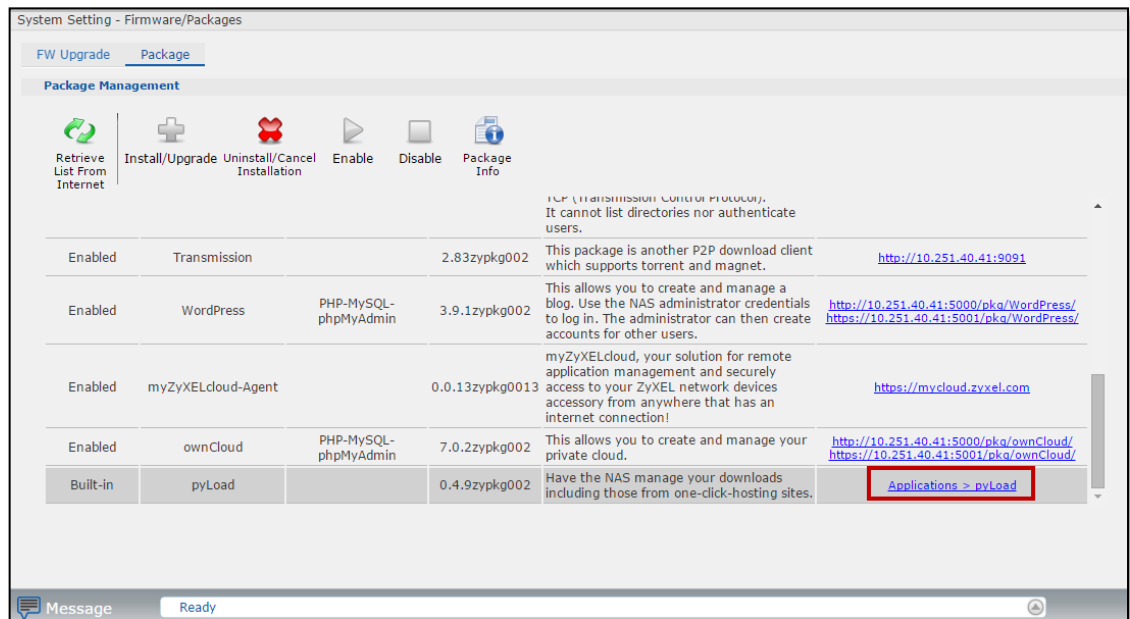
- ✓ Log into the NAS using **NAS Starter Utility** or a **Web browser**.
- ✓ Click **System Setting > Firmware/Packages > Package**.
- ✓ Click **Retrieve List From Internet**, select the **pyLoad package** from the table and then click the **Install/Upgrade** button.
- ✓ Click **Apply** to install the **pyLoad** package.



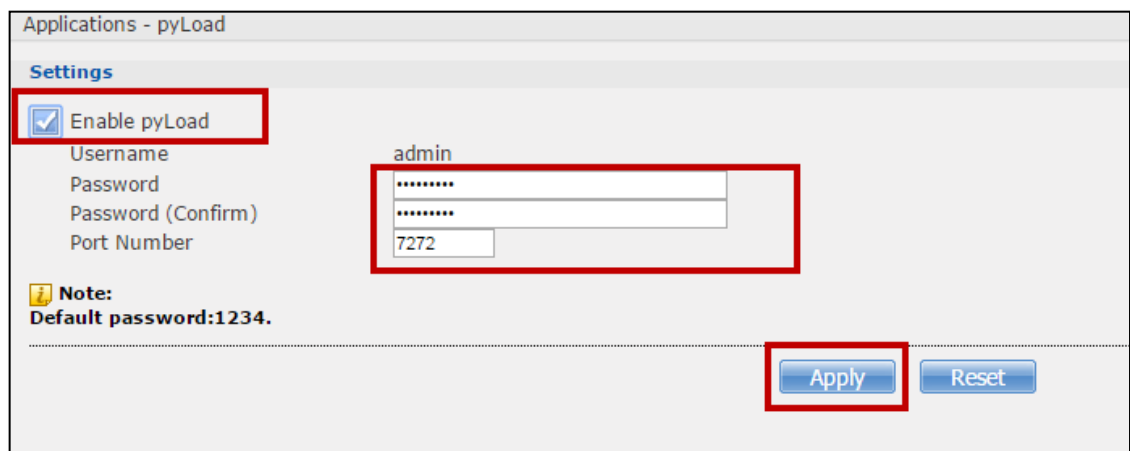
8.7.2 Configuring pyLoad on the NAS

STEPS

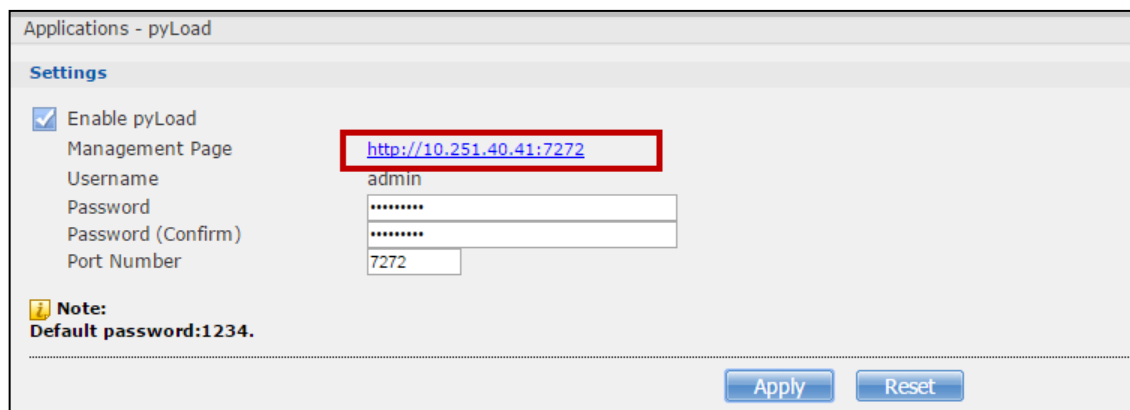
- ✓ After installing and running pyLoad, click **Applications > pyLoad** to configure an account.



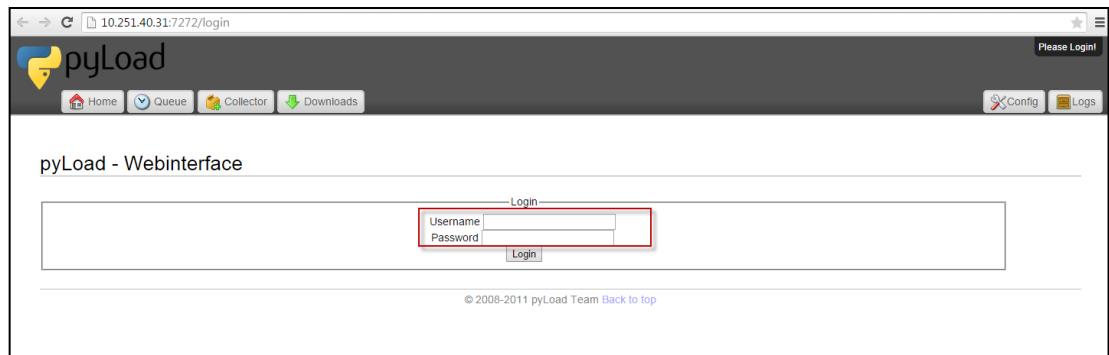
- ✓ Click **Enable pyLoad** then enter the admin **Password** and **Port Number**.



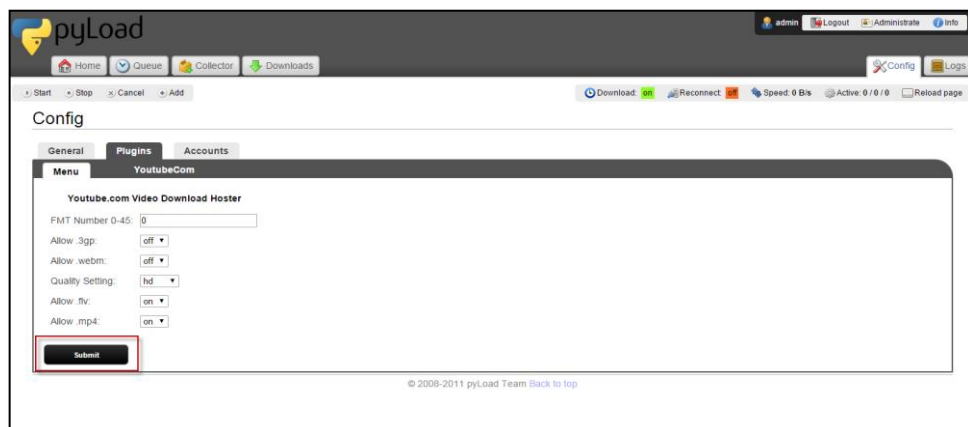
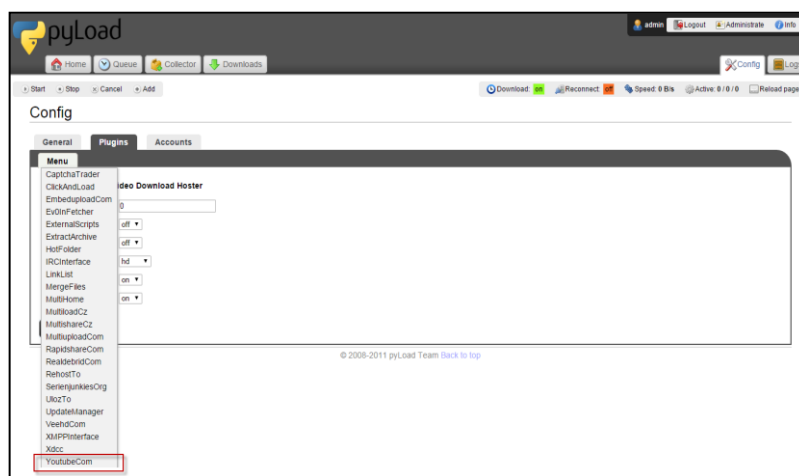
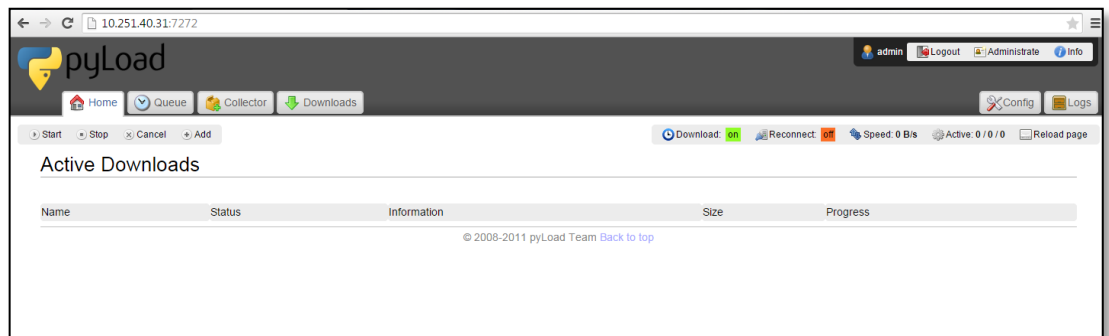
- ✓ Click the pyLoad **Management Page** link.



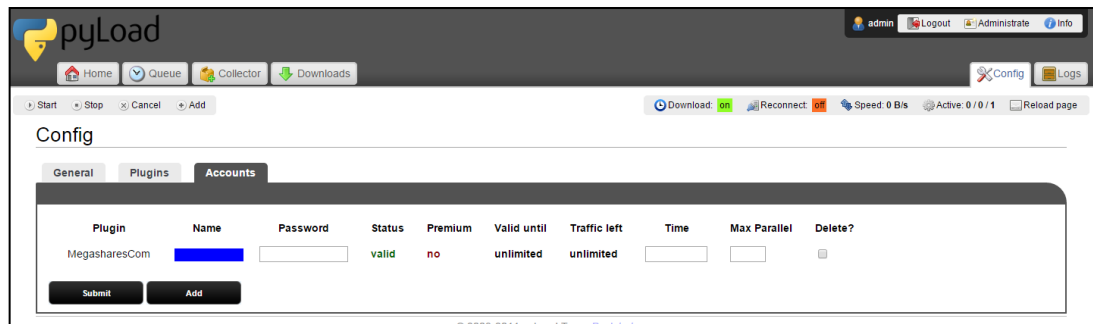
- ✓ On the **pyLoad** login page, type the username and password.



- ✓ After successfully logging in to the **pyLoad** page, configure plugin settings in the **Config > Plugins > Menu** screen.

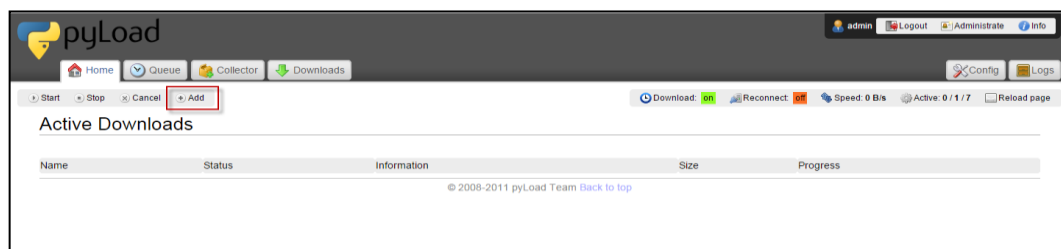


- ✓ View and configure plugin accounts in the **Config > Accounts** screen.



8.7.3 Check the Download Status on the pyLoad Page

- ✓ Go to **pyLoad > Home** and click **Add** to configure a download item.



Add Package

Paste your links or upload a container.

Name
The name of the new package.

Links
Paste your links here or any text and press the filter button.
Filter urls

Password
Password for RAR-Archive

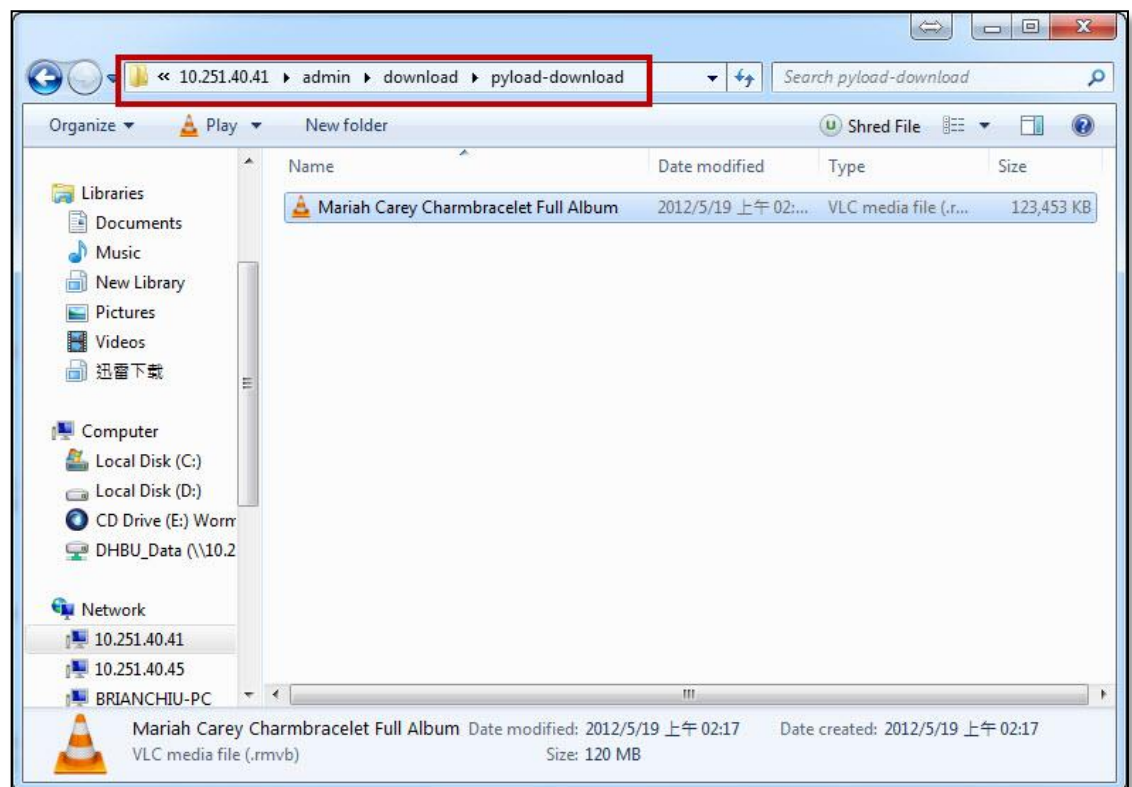
File
Upload a container. No file chosen

Destination
Queue ☒
Collector ☐

- ✓ The application starts the download process immediately.



- ✓ Once download is done, check the file(s).



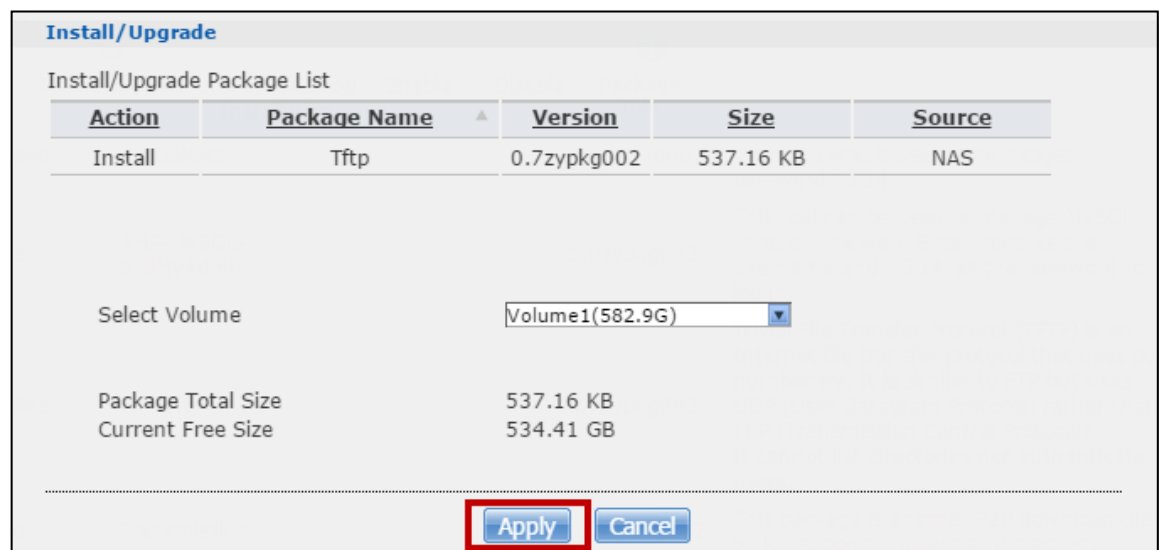
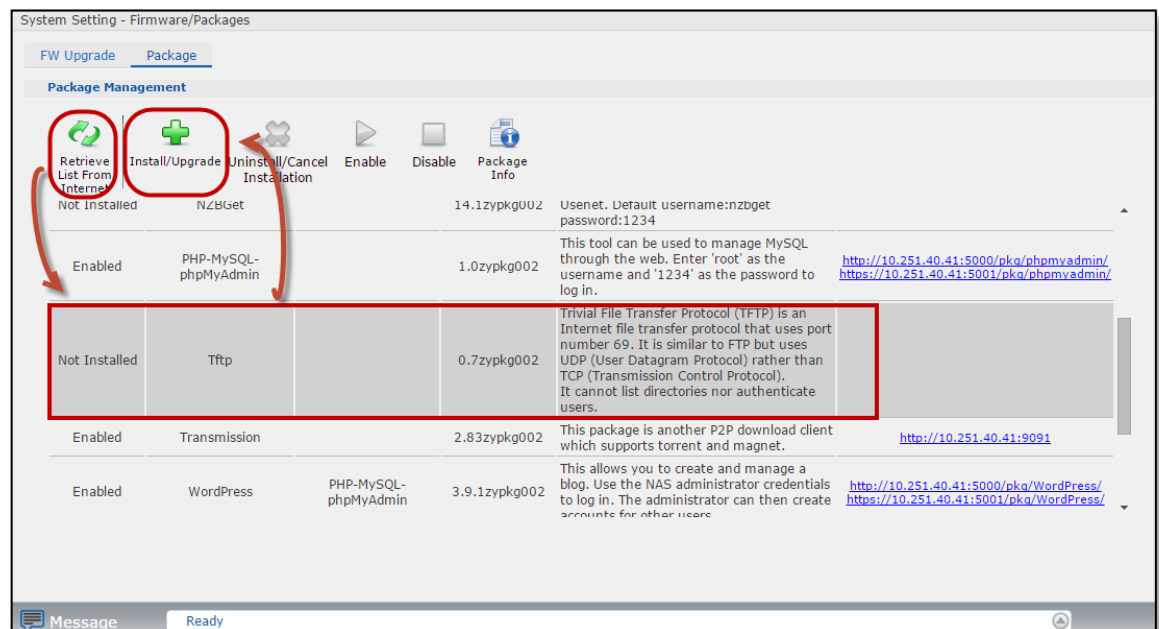
8.8 TFTP

Trivial File Transfer Protocol (TFTP) is a simple, lock-step, file transfer protocol, which allows a Client (computing) to get from or put a file onto a remote Host (network). One of its primary uses is in the early stages of nodes booting from a Local Area Network. TFTP has been used for this application because it is very simple to implement.

8.8.1 Installing TFTP from the Package Management

STEPS

- ✓ Log into the NAS using **NAS Starter Utility** or a **Web browser**.
- ✓ Click **System Setting > Firmware/Packages > Package**.
- ✓ Click **Retrieve List From Internet**, select the **TFTP package** from the table and then click the **Install/Upgrade** button.
- ✓ Click **Apply** to install the **TFTP** package.



8.8.2 Enable TFTP server on the NAS

STEPS

- ✓ After installing the TFTP server, open the NAS GUI and click **Applications** > **TFTP Server**. Check **Enable TFTP Server**.

Applications - TFTP Server

TFTP Server

☐ Enable TFTP Server

Apply Reset

8.8.3 Set Up the TFTP Share Folder on the NAS

- ✓ To add a TFTP share, enter the share name in the **Folder Name** field and click the **Add icon**. The TFTP share (e.g., TFTP testing) appears in the table. Click the share to configure it.

Browse ...

Current Location: / Folder Name:

Type	Name
	tftp upload file

Applications - TFTP Server

TFTP Server

☒ Enable TFTP Server

Upload / Download Directory Setting

Shares [View Files](#)

Path [Browse ...](#)

Apply Reset

8.8.4 Client Access to the TFTP server

- ✓ Enable TFTP server on Linux.

Site

Protocol

Host

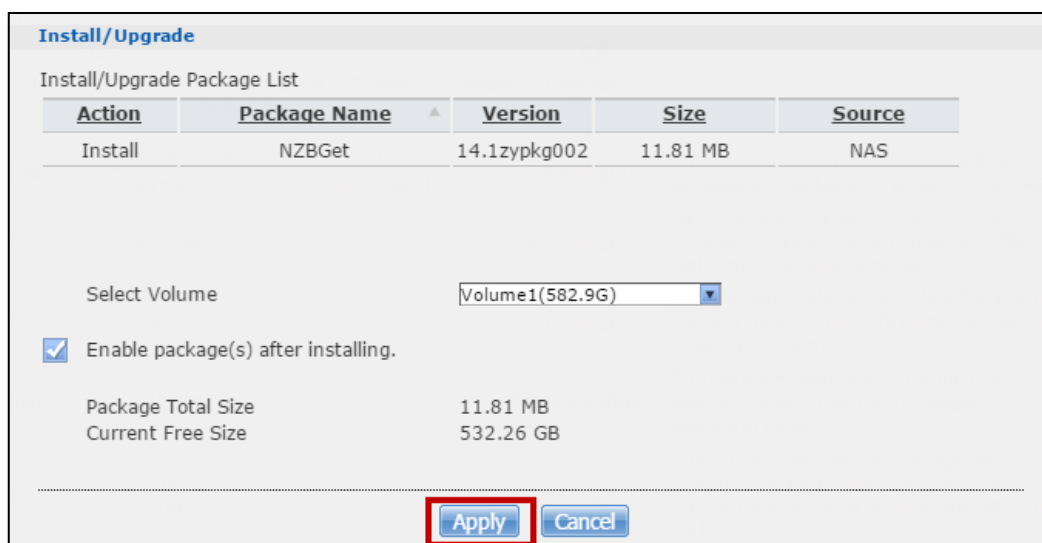
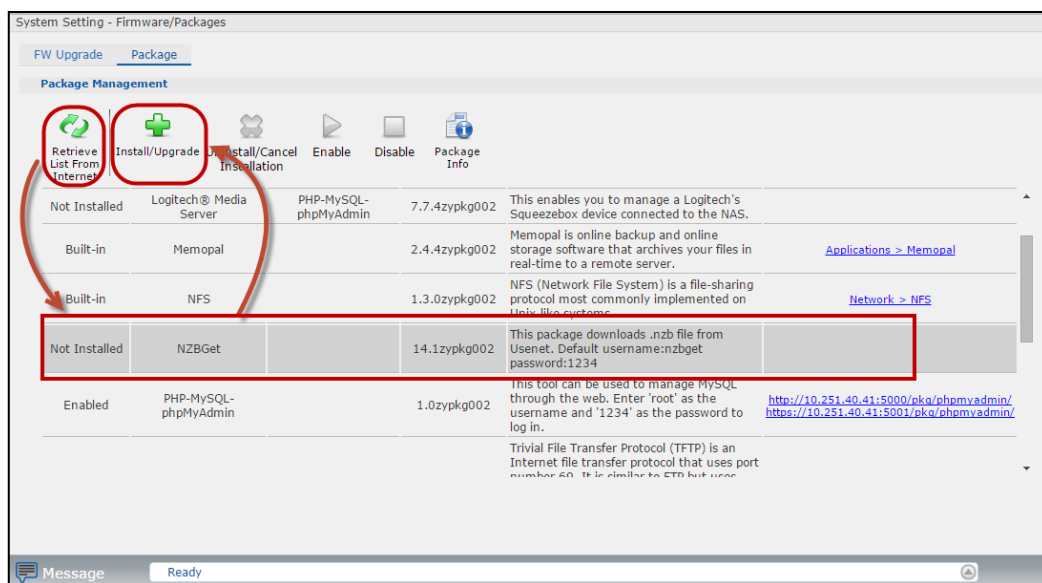
8.9 NZBGet

NZBGet is a usenet downloader, written in C++ and designed with performance in mind to achieve maximum download speed by using very little system resources. It supports all platforms including Windows, Mac, Linux and works on all devices including PC, NAS, WLAN routers and media players.

8.9.1 Installing NZBGet from the Package Management

STEPS

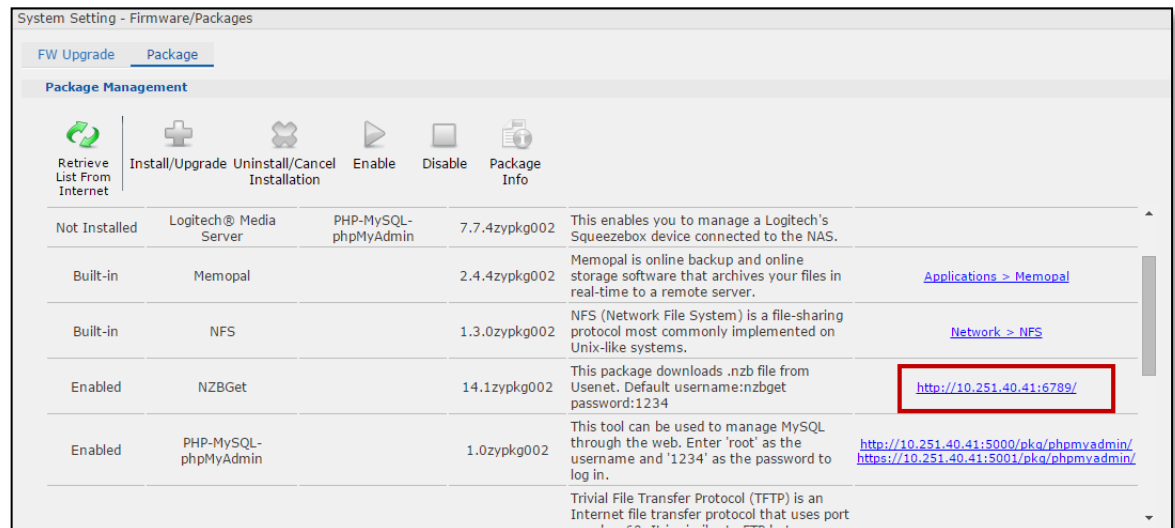
- ✓ Log into the NAS using **NAS Starter Utility** or a **Web browser**.
- ✓ Click **System Setting > Firmware/Packages > Package**.
- ✓ Click **Retrieve List From Internet**, select the **NZBGet** package from the table and then click the **Install/Upgrade** button.
- ✓ Click **Apply** to install the **NZBGet** package.



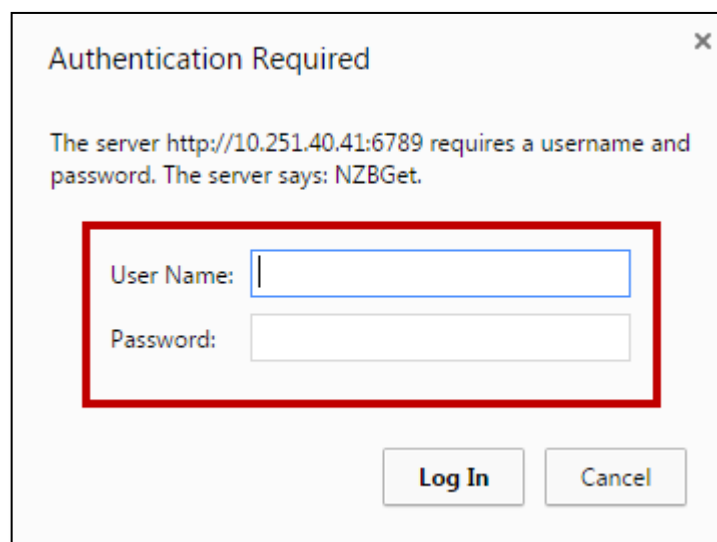
8.9.2 Enable NZBGet Service on the NAS

STEPS

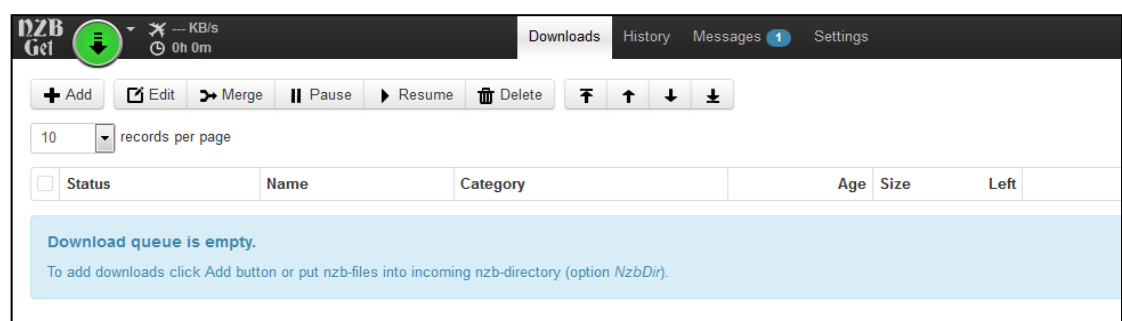
- ✓ After installing NZBGet, click the link provided (e.g., <http://NASIP:6789>) to access the NZBGet GUI.



- ✓ Enter the **User Name** and **Password** to log into the NZBGet GUI.
- ✓ Note: Use the default user name “nzbget” with password “1234”.

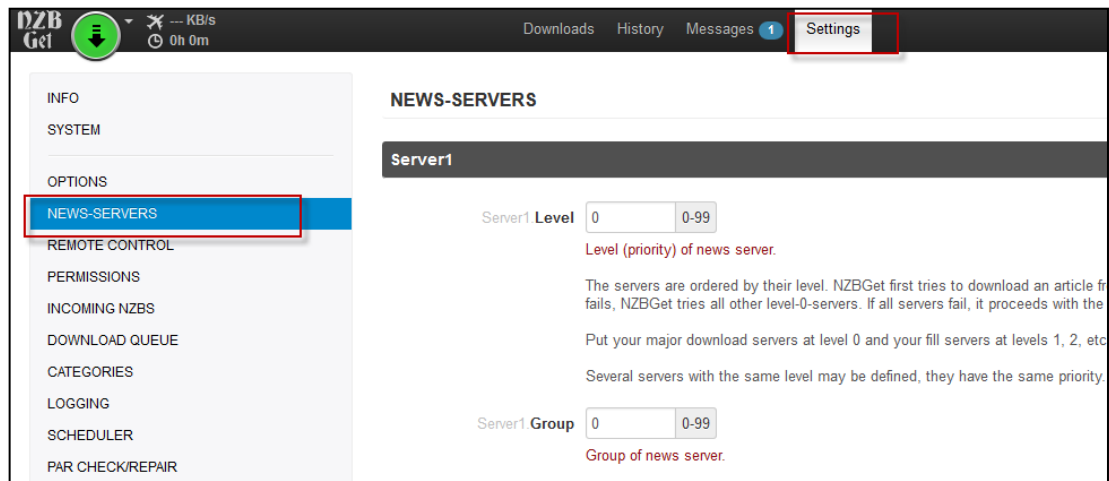


- ✓ The NZBGet GUI main screen displays.

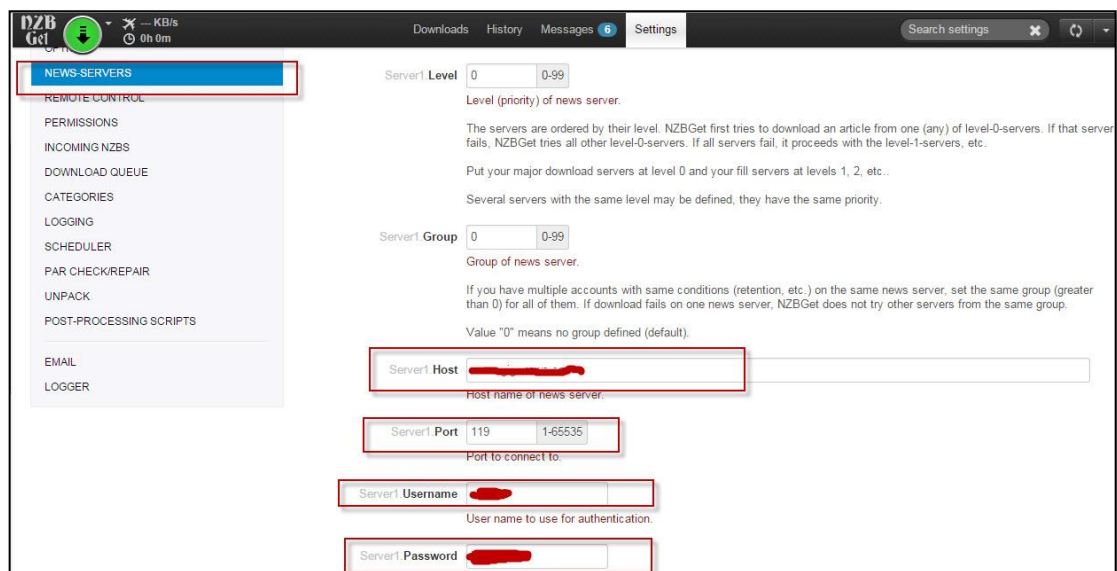


8.9.3 Configuring NZBGet

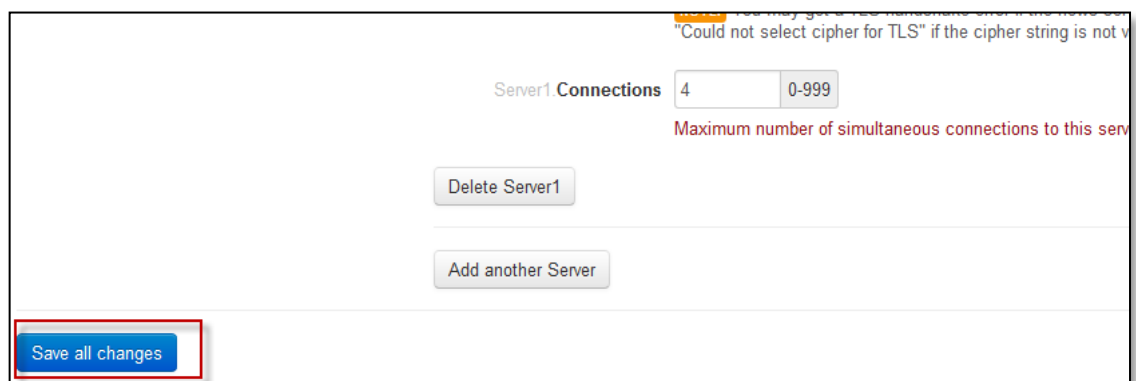
- ✓ Click **Settings** to configure **NEWS-SERVERS**.



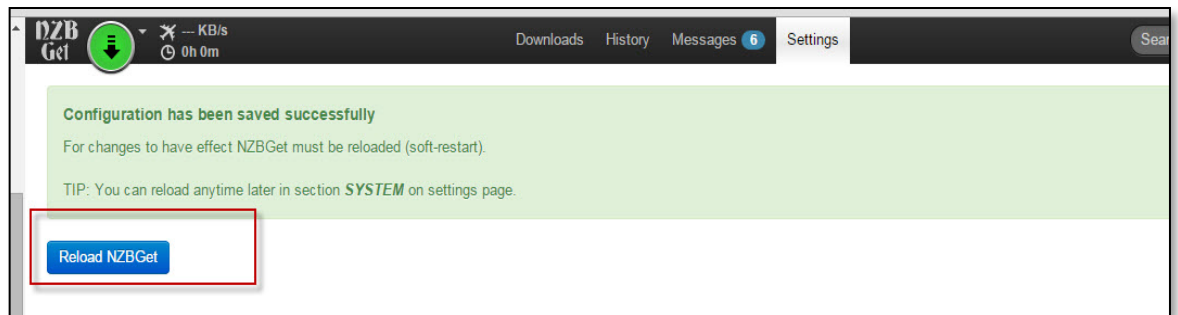
- ✓ Type the **Server Host**, **Server Port**, **Username** and **Password** that the ISP Usenet server provided.



- ✓ Click **Save all changes** to save the configuration.



- ✓ Click **Reload NZBGet** to validate the configuration.

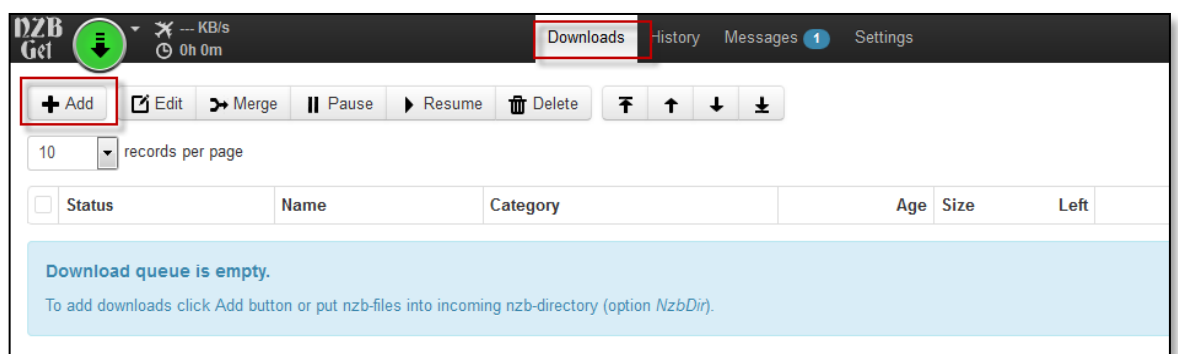


- ✓ The NSA reloads NZBGet.

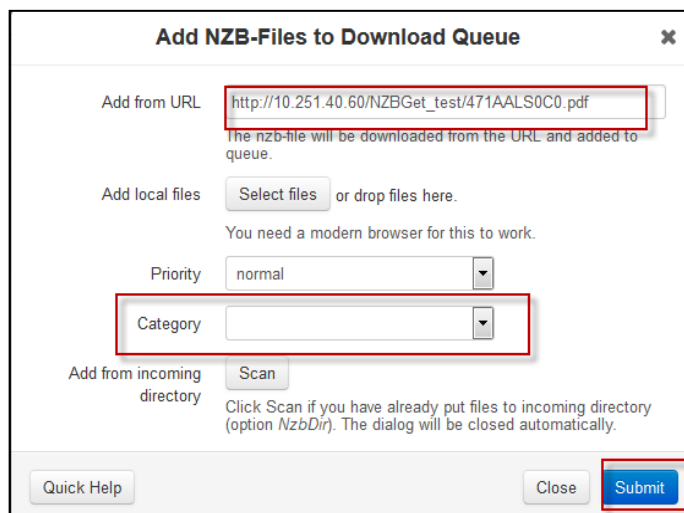


8.9.4 Download a File from an HTTP Link to the NAS via NZBGet

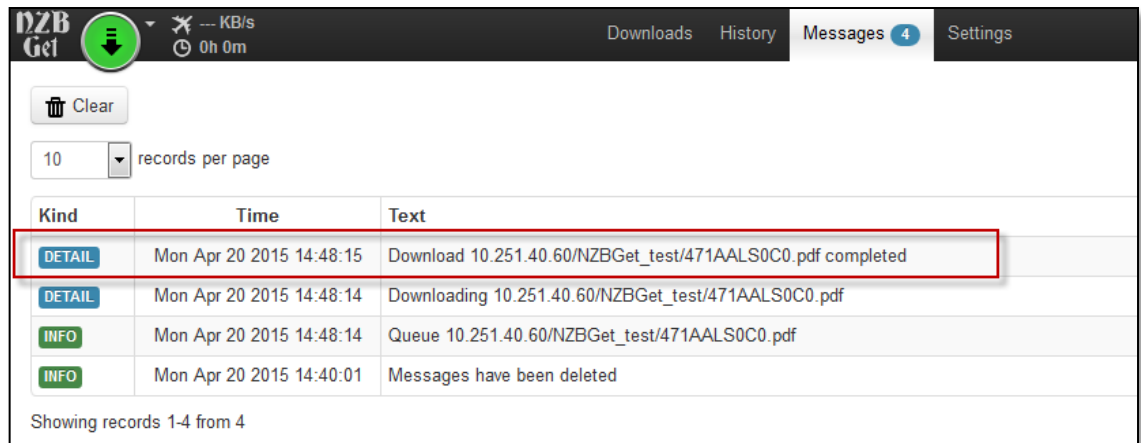
- ✓ In the NZBGet GUI, click **Download** and then click the **Add** button.



- ✓ Enter a URL, select a **Category** then click **Submit** to start downloading the file. If **Category** is left blank, the file is automatically stored in **/admin/download/nzbget/nzb/**.



- ✓ Check the file's download status in the Messages page.

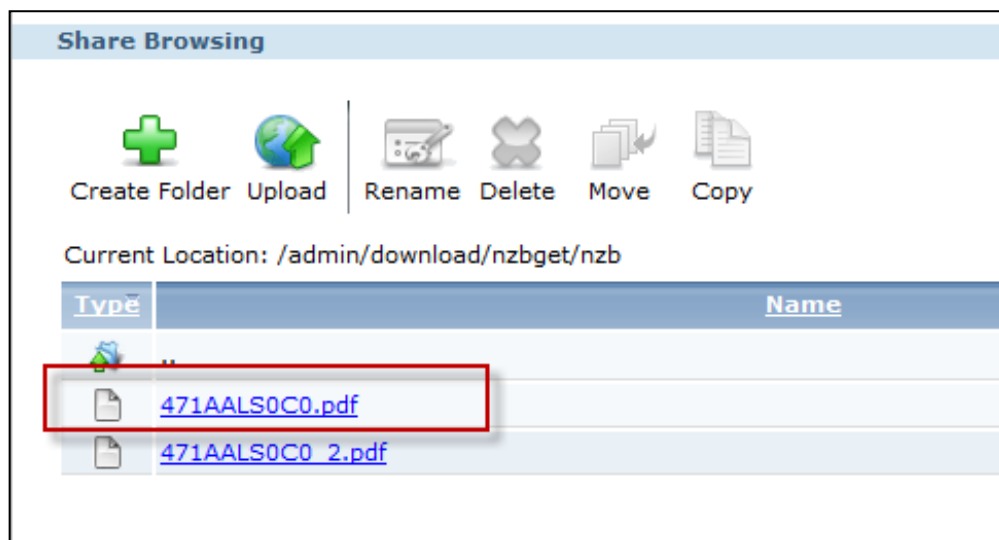


The screenshot shows the NZBGet interface with the 'Messages' tab selected. It displays a list of four messages. The first message, 'Download 10.251.40.60/NZBGet_test/471AALS0C0.pdf completed', is highlighted with a red box. The other messages are 'Downloading 10.251.40.60/NZBGet_test/471AALS0C0.pdf', 'Queue 10.251.40.60/NZBGet_test/471AALS0C0.pdf', and 'Messages have been deleted'.

Kind	Time	Text
DETAIL	Mon Apr 20 2015 14:48:15	Download 10.251.40.60/NZBGet_test/471AALS0C0.pdf completed
DETAIL	Mon Apr 20 2015 14:48:14	Downloading 10.251.40.60/NZBGet_test/471AALS0C0.pdf
INFO	Mon Apr 20 2015 14:48:14	Queue 10.251.40.60/NZBGet_test/471AALS0C0.pdf
INFO	Mon Apr 20 2015 14:40:01	Messages have been deleted

Showing records 1-4 from 4

- ✓ Check the downloaded file on the NAS.

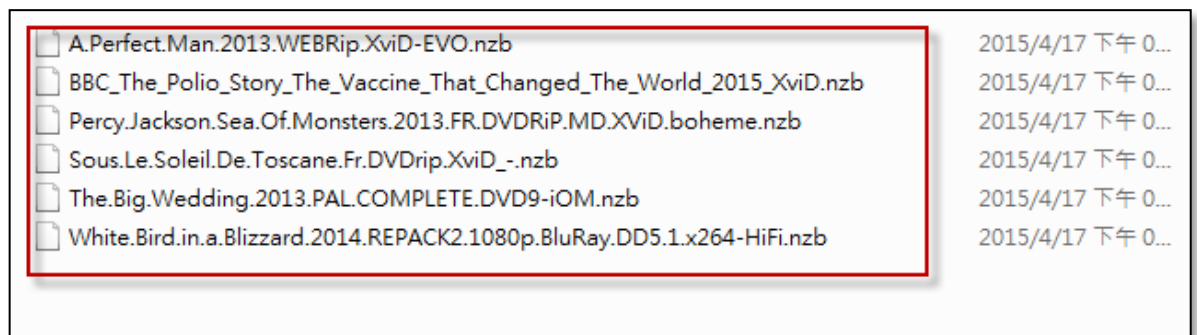


The screenshot shows the 'Share Browsing' interface with a list of files. The file '471AALS0C0.pdf' is highlighted with a red box. The other file listed is '471AALS0C0_2.pdf'.

Type	Name
File	471AALS0C0.pdf
File	471AALS0C0_2.pdf

8.9.5 Download a .NZB File via NZBGet

- ✓ Download a .NZB file and save it on the local computer.

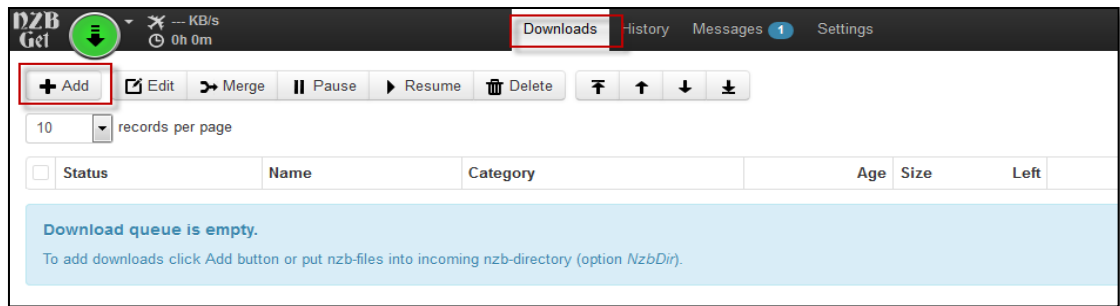


The screenshot shows a list of .NZB files. The first six files are highlighted with a red box. The files are:

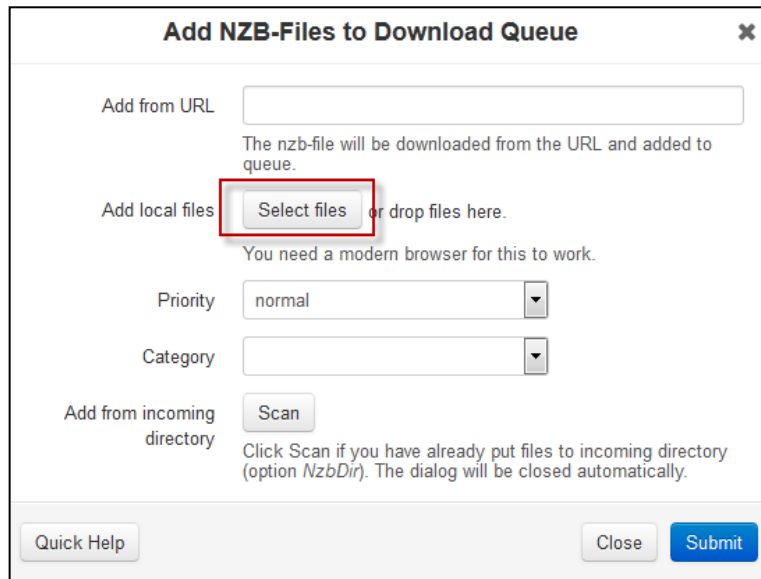
- A.Perfect.Man.2013.WEBRip.XviD-EVO.nzb
- BBC_The_Polio_Story_The_Vaccine_That_Changed_The_World_2015_XviD.nzb
- Percy.Jackson.Sea.Of.Monsters.2013.FR.DVDRip.MD.XviD.boheme.nzb
- Sous.Le.Soleil.De.Toscane.Fr.DVDrip.XviD_-.nzb
- The.Big.Wedding.2013.PAL.COMPLETE.DVD9-iOM.nzb
- White.Bird.in.a.Blizzard.2014.REPACK2.1080p.BluRay.DD5.1.x264-HiFi.nzb

The download times for these files are all '2015/4/17 下午 0...'.

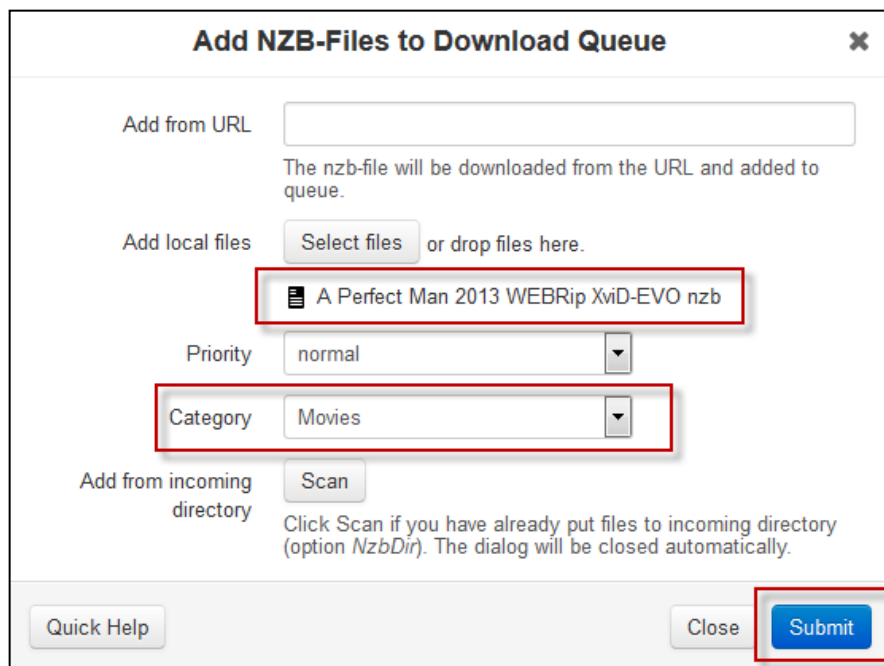
- ✓ In the NZBGet GUI, click **Download** and then click the **Add** button.



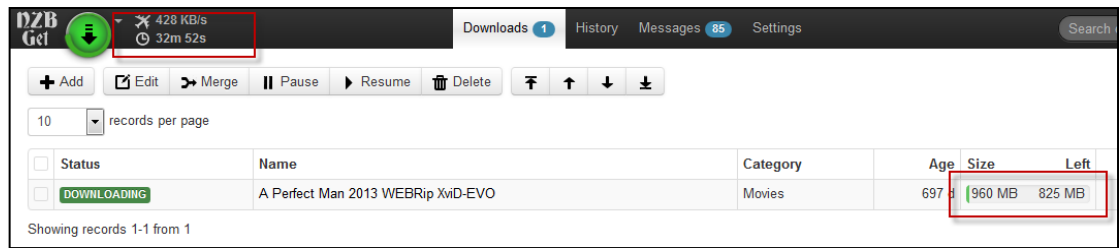
- ✓ Click **Select files**.



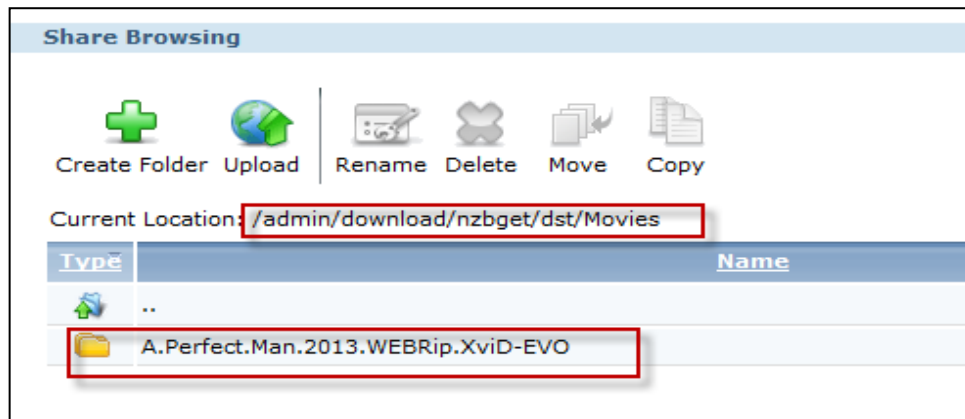
- ✓ Select the downloaded .NZB file, choose a **Category** and then click **Submit**.



- ✓ The file is downloading.



- ✓ When the download is finished, the file should now be available on the NAS.



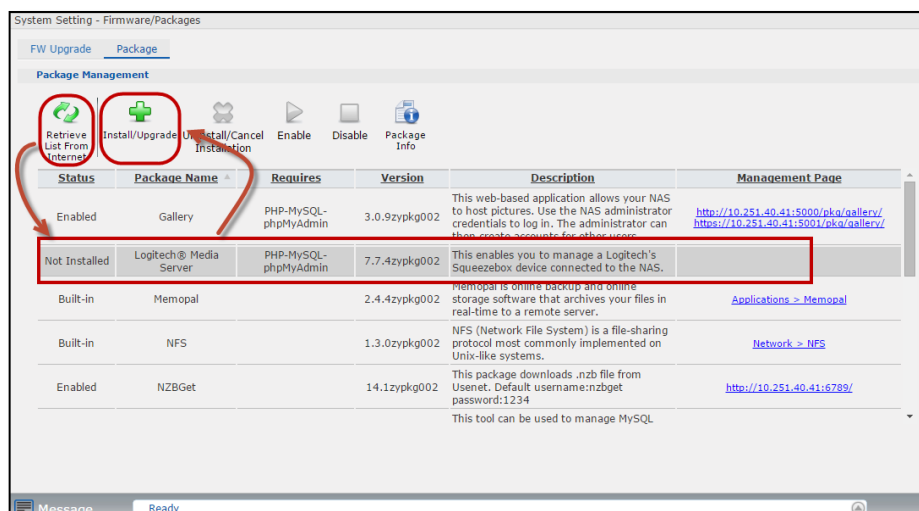
8.10 Logitech® Media Server

Logitech® Media Server is a media server which enables users to manage a Logitech's Squeezebox device connected to the NAS.

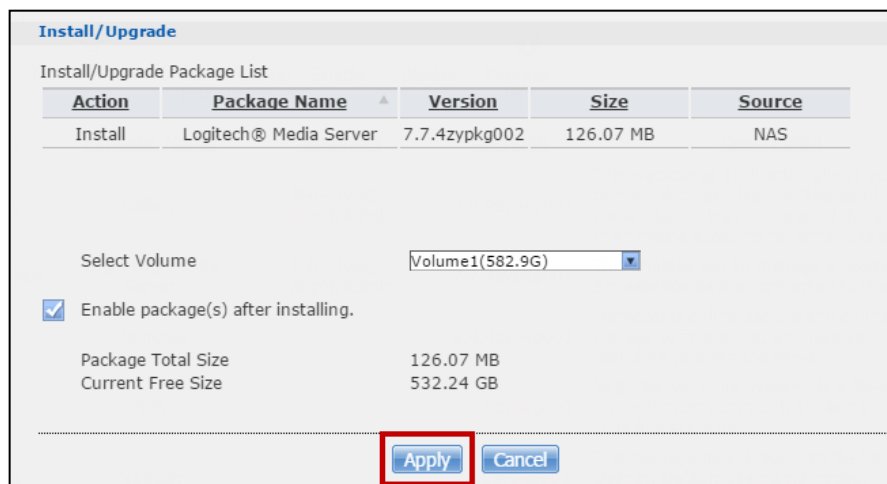
8.10.1 Installing Logitech® Media Server from the Package Management

STEPS

- ✓ Log into the NAS using **NAS Starter Utility** or a **Web browser**.
- ✓ Click **System Setting > Firmware/Packages > Package**.
- ✓ Click **Retrieve List From Internet**, select the **Logitech® Media Server package** from the table and then click the **Install/Upgrade** button.



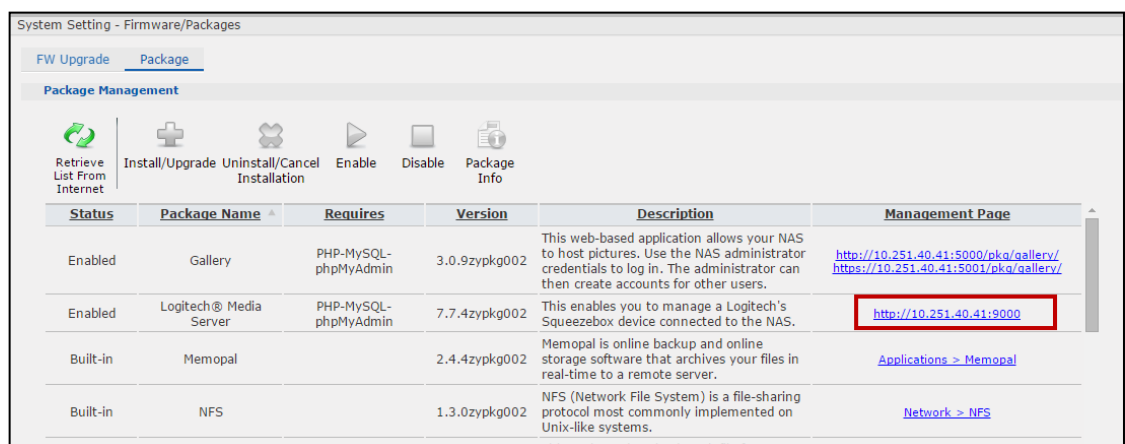
- ✓ Click **Apply** to install the **Logitech® Media Server** package.
Note: **PHP-MySQL-phpMyAdmin** are required. If not installed, users will be asked to install both packages.



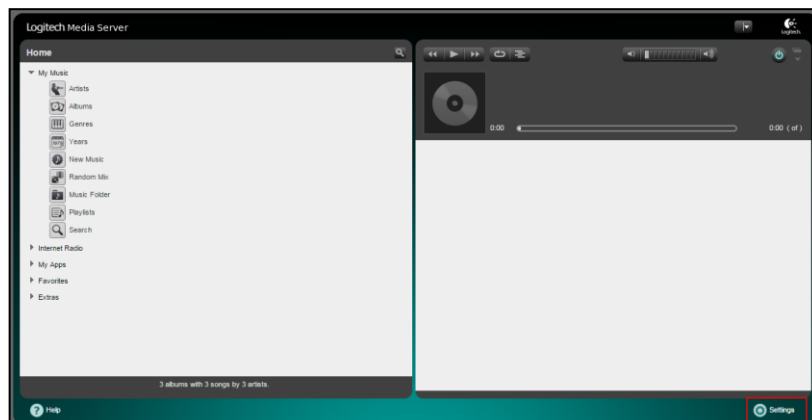
8.10.2 Configuring Logitech® Media Server on the NAS

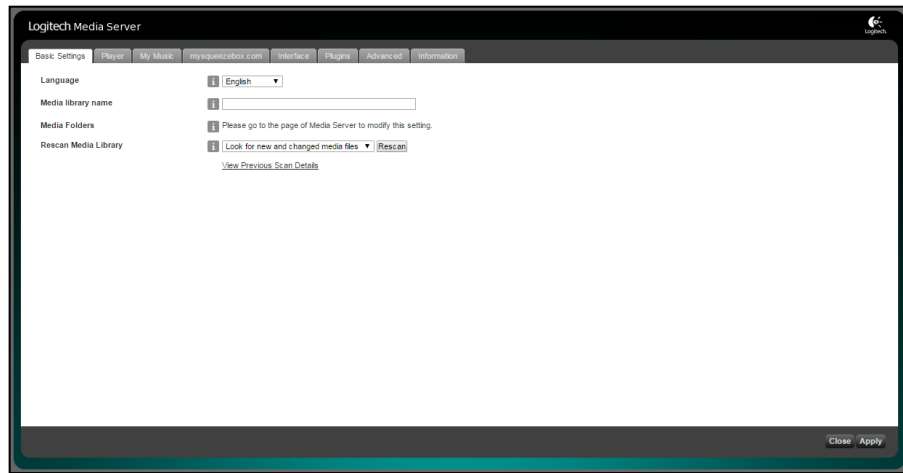
STEPS

- ✓ After installation, click the link provided to configure **Logitech® Media Server**.



- ✓ Click **Settings** located at the bottom-right corner of the screen to enter the configuration page.

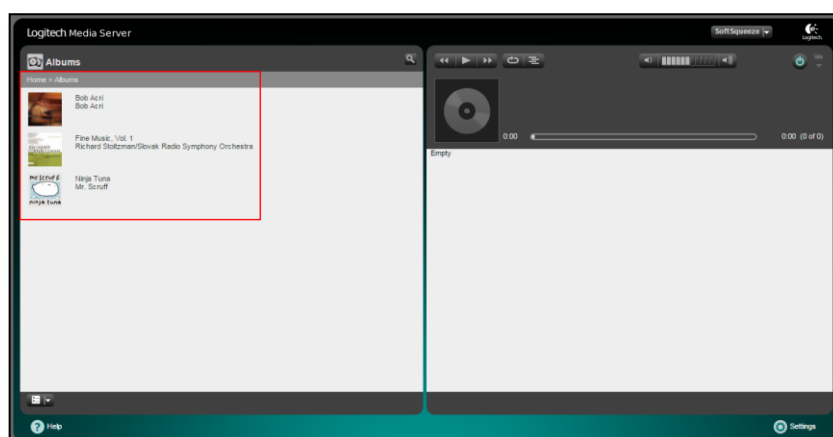
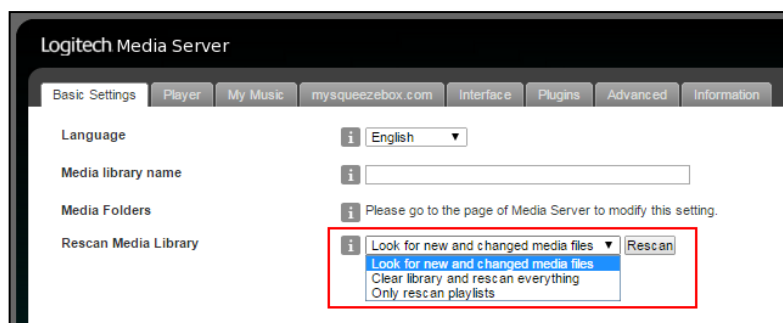




- ✓ Configure the settings by following the instructions on each page. Click **Apply** to save the settings. Mouse over an **i** icon to view the corresponding instruction.

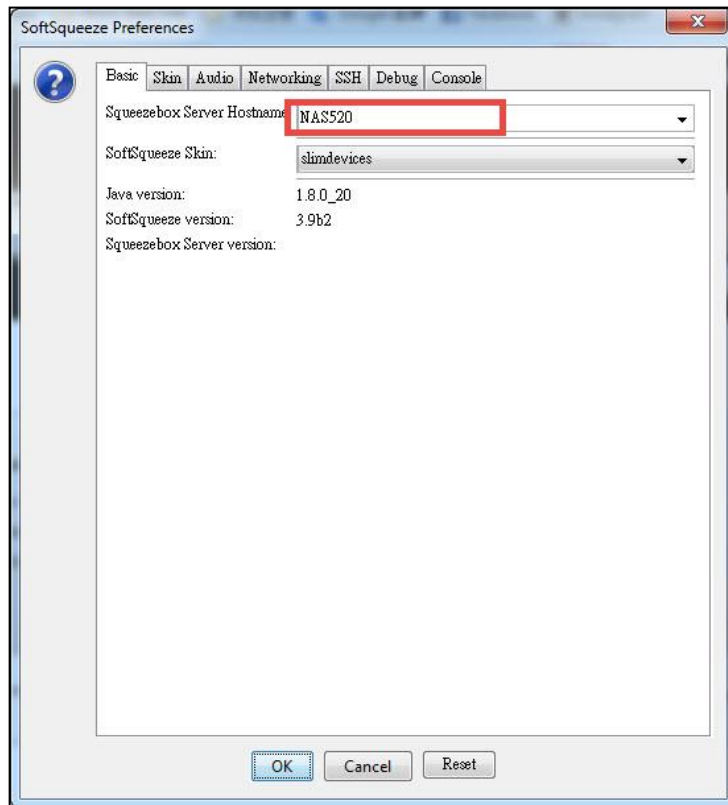


- ✓ Rescan the media library if any media content shown on the list is not available.



8.10.3 Playing the media content via Logitech® Media Server by SoftSqueeze

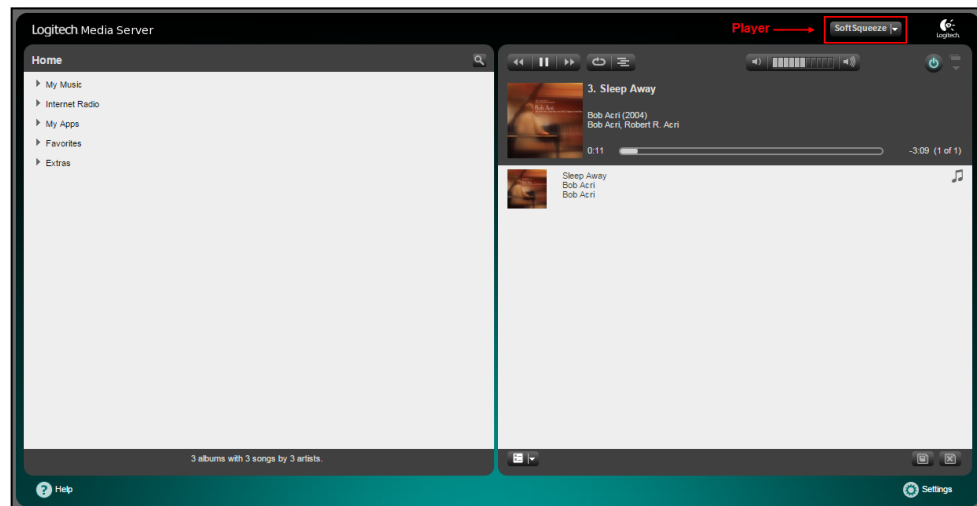
- ✓ If users do not have Logitech's Squeezebox device, there is a free software called SoftSqueeze, which simulates Squeezebox on a PC. Download it from <http://softsqueeze.sourceforge.net>.
- ✓ When launching this software, the preferences window will be prompted. Please select the Squeezebox Server Hostname from the list to connect to Logitech® Media Server.
If the list of Squeezebox Server Hostname is empty, please make sure both server and PC are in the same network.



- ✓ After successfully connecting SoftSqueeze to Logitech® Media Server, users can access the media content in the storage.



- ✓ The currently playing media content is displayed on the web GUI of Logitech® Media Server.



8.11 PHP-MySQL-phpMyAdmin

PHP

Known as the "PHP: Hypertext Preprocessor," PHP is a widely used computer programming language. It is used to create dynamic Web pages, or Web pages that update and display information depending on the user's activity. PHP is mainly a server side language, allowing it to process Web pages faster and easier, providing a better user experience.

Reference: http://www.ehow.com/info_8484766_description-php.html

MySQL

MySQL is a database management system. A database is a structured collection of data. It may be anything from a simple shopping list to a picture gallery or the vast amounts of information in a corporate network. To add, access, and process data stored in a computer database, users need a database management system such as MySQL Server. Since computers are very good at handling large amounts of data, database management systems play a central role in computing, as standalone utilities, or as parts of other applications.

Reference: <https://dev.mysql.com/doc/refman/4.1/en/what-is-mysql.html>

phpMyAdmin

phpMyAdmin is a free software tool written in PHP, intended to handle the administration of MySQL over the Web. It supports a wide range of operations on MySQL, MariaDB and Drizzle. Frequently used operations (managing databases, tables, columns, relations, indexes, users, permissions, etc.) can be performed via the user interface, while still having the ability to directly execute any SQL statement.

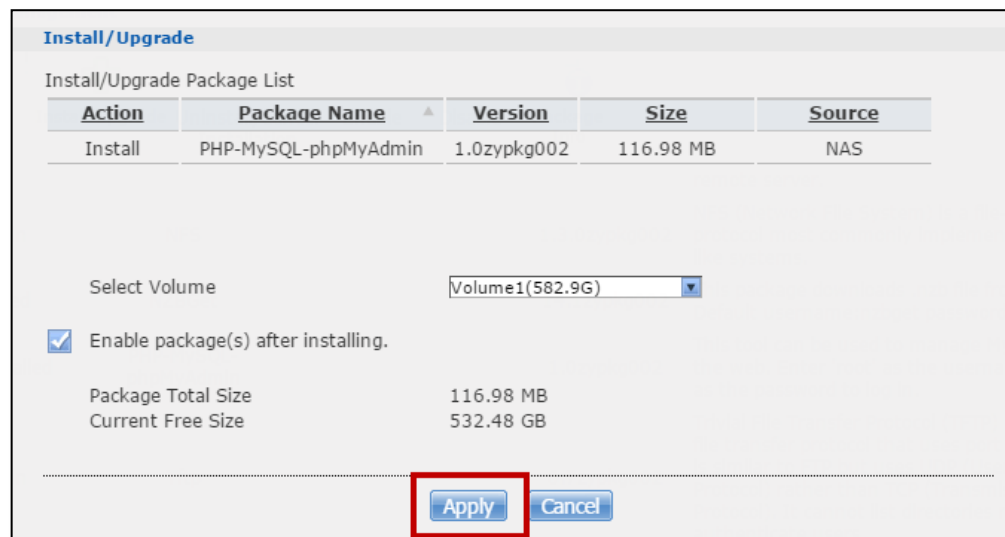
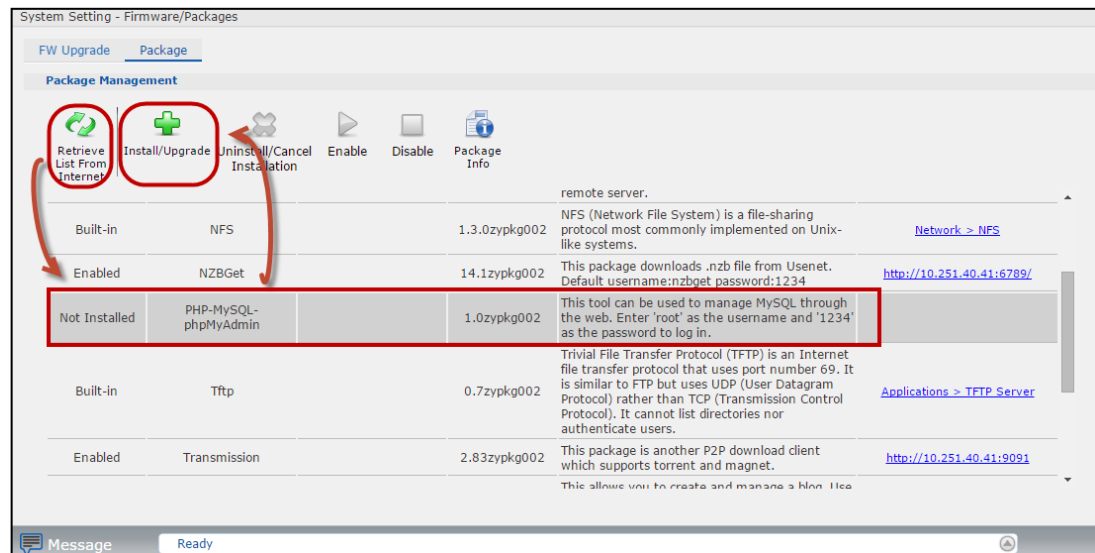
Reference: http://www.phpmyadmin.net/home_page/index.php

Note: **WordPress**, **Gallery**, **SqueezeCenter** and **ownCloud** cannot be modified in phpMyAdmin.

8.11.1 Installing PHP-MySQL-phpMyAdmin from the Package Management

STEPS

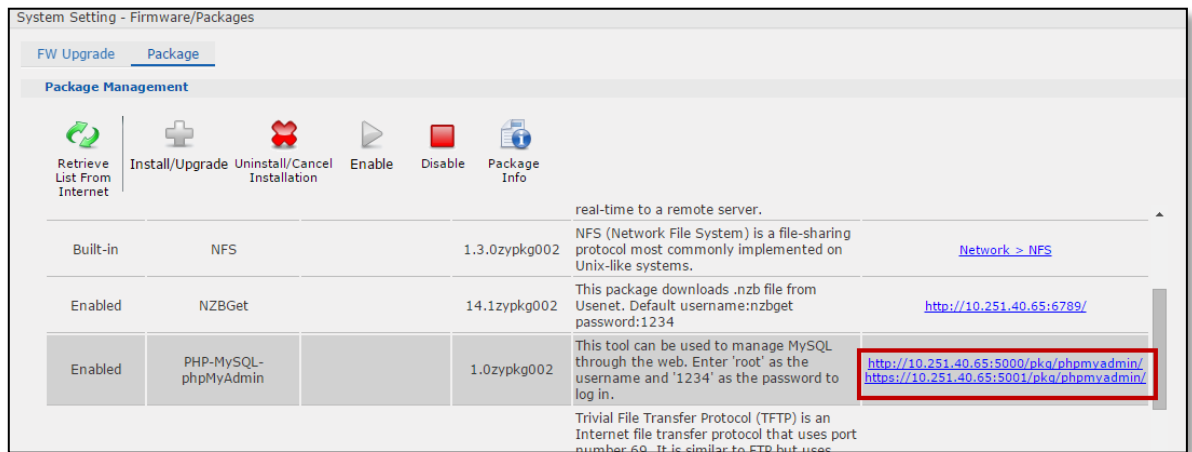
- ✓ Log into the NAS using **NAS Starter Utility** or a **Web browser**.
- ✓ Click **System Setting > Firmware/Packages > Package**.
- ✓ Click **Retrieve List From Internet**, select the **PHP-MySQL-phpMyAdmin package** from the table and then click the **Install/Upgrade** button.
- ✓ Click **Apply** to install the **PHP-MySQL-phpMyAdmin** package.



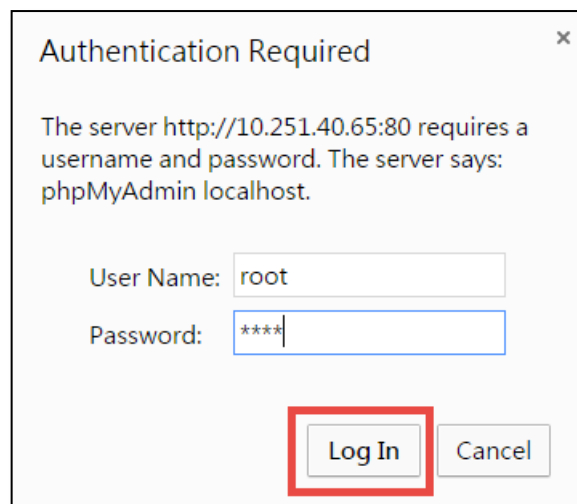
8.11.2 Configuring phpMyAdmin on the NAS

STEPS

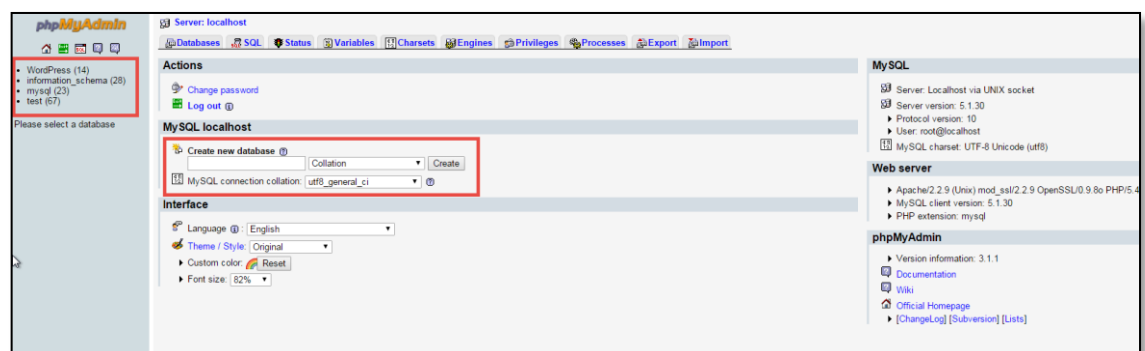
- ✓ After installing and running **phpMyAdmin**, click the provided link to configure an SQL table.



- ✓ Enter the **NSA User Name** and **Password** in order to access the **phpMyAdmin** page.



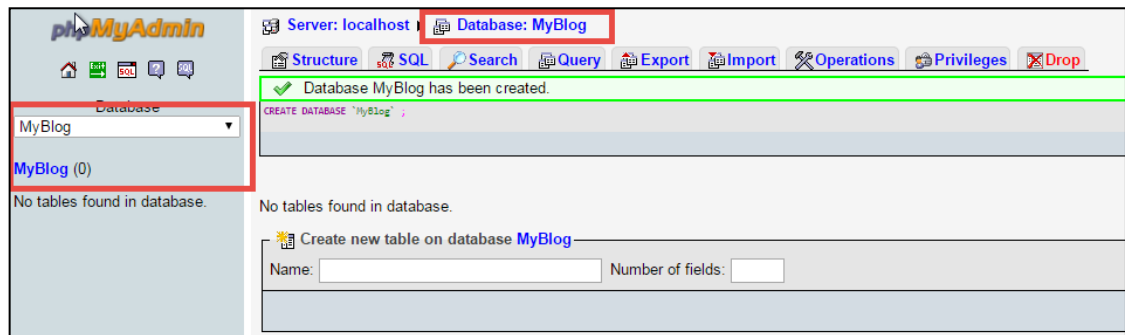
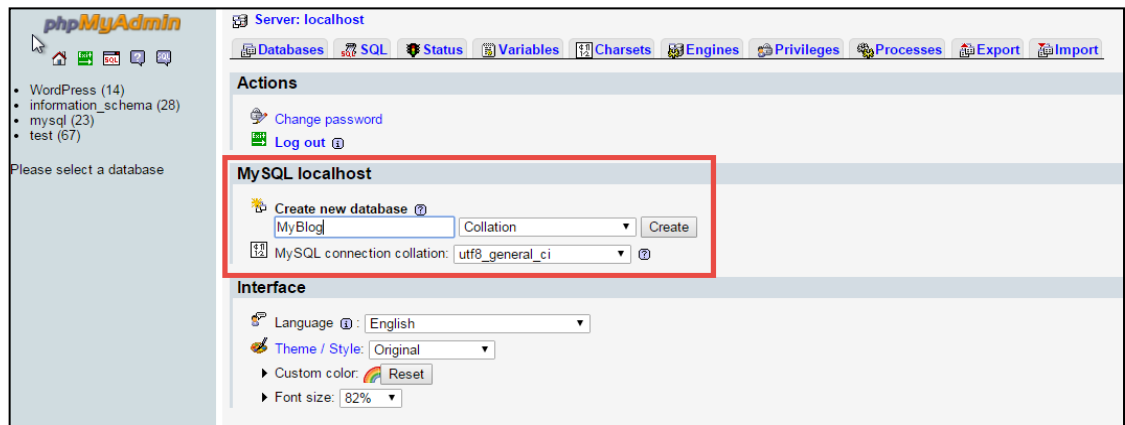
- ✓ Click **Databases** to check existing databases, create a new database, and manage databases and tables.



8.11.3 Example

STEPS

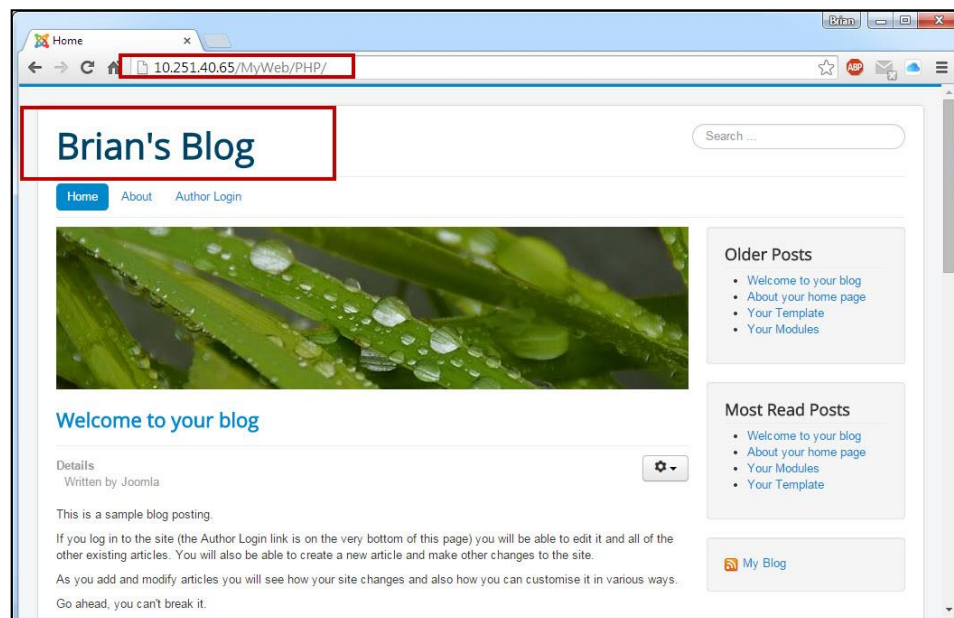
- ✓ Under **MySQL localhost**, create a new database for a web site, such as a blog.



- ✓ Configure the web information (i.e., **Host Name**, **Username** and **Password**) to sync the databases with **MySQL**.



- ✓ After syncing databases, a number of tables will be created and users can start setting up the web site.



9 DyDNS

Dynamic DNS points an easy to remember hostname to a dynamic IP address. If a NAS is set up with a dynamic IP address behind a router, a host name can be configured on the NAS. When users are outside and want to access the NAS, they can log in using the hostname of DyDNS in case they forget or do not know the IP address of the unit.

9.1 Set up DyDNS on the NAS

STEPS

- ✓ Click **Network > DyDNS** to configure an account.

Network - DyDNS

Status

Status Disable by user

Gateway Information

Default Gateway LAN1

Internal Address Unknown

External Address

Configuration

Enable DyDNS support to allow users to access the server through a registered hostname.

☐ Enable DyDNS

Service Provider DynDNS.com

Hostname

Username

Password

Password (Confirm)

Apply Reset

Message Ready

- ✓ A drop-down menu containing DDNS support services appears.
- ✓ Note: The DDNS support service, **myzyxel.in.th**, can be used in Thailand only.

DynDNS.com

DynDNS.com

NoIP.com

3322.org


zoneedit.com

dhs.org


myzyxel.in.th

- ✓ The following steps set up DyDNS using NoIP.
- ✓ Create a host on a NoIP account.

Manage Hosts

 Host mynas520.no-ip.org created. Update will be applied within 1 minute.

Current Hosts: 2 Need More Hosts? Enhance Your Account! [Enhance Your Account](#)

Host	IP/URL	Action
 Hosts By Domain		
no-ip.org		
mynas520.no-ip.org	114.34.247.205	Modify Remove

[Add A Host](#)

- ✓ Check **Enable DyDNS**.
- ✓ Type the **Hostname**, which will be created on the NoIP domain.
- ✓ Type the **Username/Password** for the NoIP account.
- ✓ Click **Apply** to save the configuration.

Network - DyDNS

Status

Status Success to update

Gateway Information

Default Gateway: LAN1
Internal Address: 10.251.40.41
External Address: 114.34.247.205

Configuration

Enable DyDNS support to allow users to access the server through a registered hostname.

☒ Enable DyDNS

Service Provider: DynDNS.com

Hostname: mynas520.no-ip.org

Username:

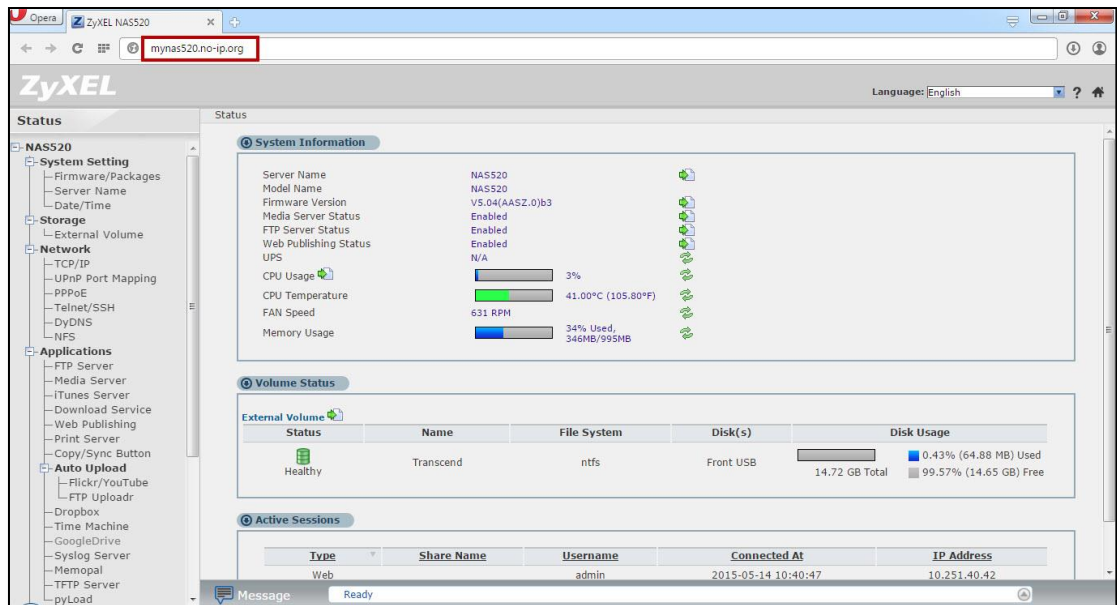
Password: *****

Password (Confirm): *****

[Apply](#) [Reset](#)

Message: Ready

- ✓ Log into the NAS via the defined hostname to confirm the settings.



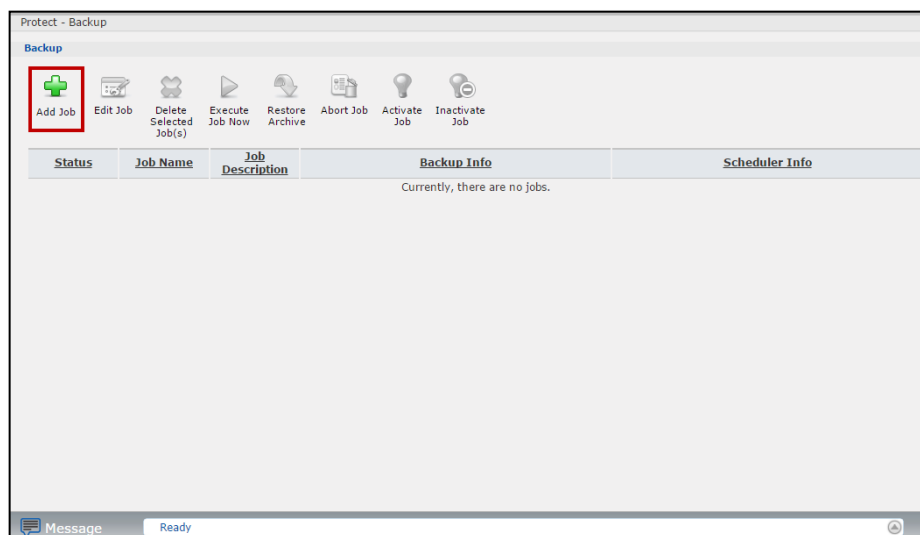
10. Protect

Use the NSA's Backup to have a backup of files and folders.

This packet enables users to schedule a backup of important files when the NSA is not busy (such as during the night or on weekends). For example, users can do daily backups of important individual files or folders, and a weekly general archive. Save the backup to another location so that files are safe even if the original RAID or NSA fails.

10.1 Set up a Backup task on the NAS

- ✓ The following is an example wherein NAS data are sent to a remote storage for backup.
- ✓ Create a backup job by clicking **Protect > Backup**.
- ✓ Use NAS to create a backup job in which files are stored to another NAS (e.g., NSA325 v2).
- ✓ Click **Add Job**.



- ✓ Select a backup type: choose **Archive > Full**.

The screenshot shows the 'Protect - Backup' window with the title 'Add a new backup Job'. It is at 'Step 1' with two tabs: 'Job Information' and 'Backup Type'. Under 'Job Information', 'Job Name' is 'FullBackup' and 'Job Description' is 'Add new backup for NAS'. Under 'Backup Type', the 'Archive' radio button is selected, and the 'Full' sub-option is highlighted with a red rectangle. Other options include 'Incremental', 'Synchronization', and 'Rsync'. A 'Next' button is in the bottom right. The bottom status bar shows 'Message' and 'Ready'.

- ✓ Choose a folder.

The screenshot shows the 'Protect - Backup' window at 'Step 2'. The 'Backup Source' tab is active, showing a tree view under 'Volume1' with folders 'video', 'photo', 'music', 'admin' (highlighted with a red rectangle), 'Hemipar', 'nfs', and 'TFTP'. Below this, 'Selected Source Folders' lists 'Volume1/admin/'. The 'Backup Target' tab is also visible, with 'Remote' selected and fields for 'Remote NSA Address', 'Username', 'Password', and 'Share Name'. There is a 'Test Connection' button and radio buttons for 'Local' and 'External'. 'Previous' and 'Next' buttons are in the bottom right. The bottom status bar shows 'Message' and 'Ready'.

- ✓ Make sure the connection is up between NSA520 and NSA325 v2.

- ✓ Compress the file.
- ✓ Users can either have an encryption password for the compression file or opt not to have a password.
- ✓ The following is an example of a backup without a password.

- ✓ If the user has set up a password, it must be remembered. The password will be needed in order to restore the backup file.

- ✓ Set a backup time.

Protect - Backup

Add a new backup Job

Step 4

Scheduler

Backup Frequency:

Start Time (hh:mm): :

Every how many days? *

[Previous](#) [Done](#)

- ✓ Wait for the backup job to finish.

Protect - Backup

Backup

[Add Job](#)
[Edit Job](#)
[Delete Selected Job\(s\)](#)
[Execute Job Now](#)
[Restore Archive](#)
[Abort Job](#)
[Activate Job](#)
[Inactivate Job](#)

Status	Job Name	Job Description	Backup Info	Scheduler Info
WAITING	Fullbackup	Add new backup for NA S	Backup Type: Full Backup Source: /Volume1/admin/ Backup Target: 10.251.40.40:admin/	Frequency: Daily Last Run Time: N/A Last Run Result: N/A Next Run Time: 2015-05-15 00:00:00

Message Ready

- ✓ Job is in progress as shown in the **Running** bar.

Protect - Backup

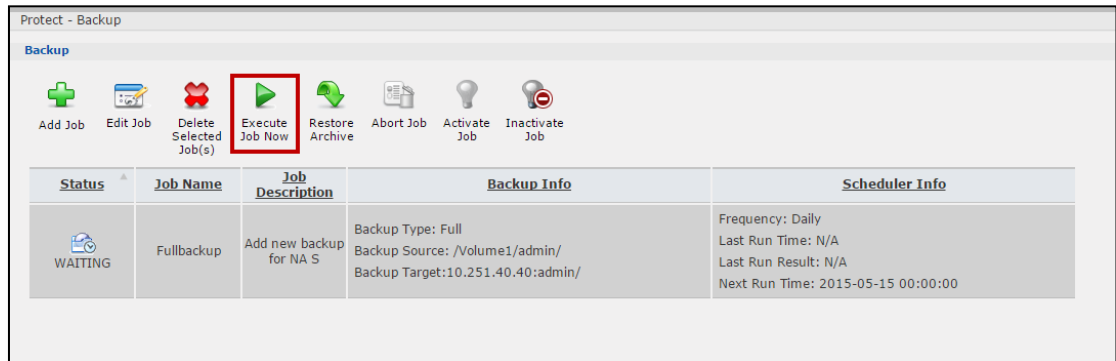
Backup

[Add Job](#)
[Edit Job](#)
[Delete Selected Job\(s\)](#)
[Execute Job Now](#)
[Restore Archive](#)
[Abort Job](#)
[Activate Job](#)
[Inactivate Job](#)

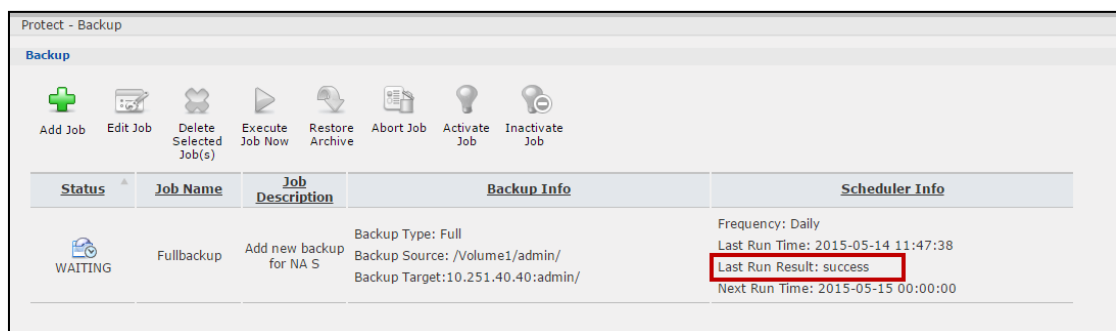
You must abort the currently running job if you want to restore a job.

Status	Job Name	Job Description	Backup Info	Scheduler Info
RUNNING	Fullbackup	Add new backup for NA S	Backup Type: Full Backup Source: /Volume1/admin/ Backup Target: 10.251.40.40:admin/	Frequency: Daily Last Run Time: 2015-05-14 11:47:38 Last Run Result: N/A Next Run Time: 2015-05-15 00:00:00

- ✓ Note: The backup job can be manually started to run immediately by clicking **Execute Job Now**.



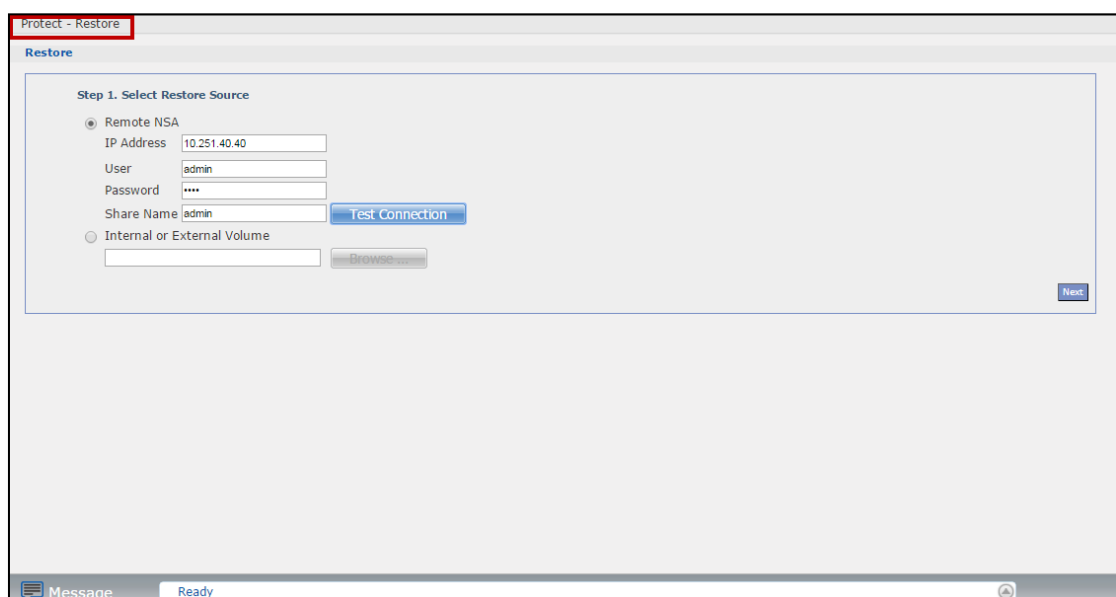
- ✓ Backup task is finished.
- ✓ The files are ready to be restored.



10.2 Restore file from a remote location

STEPS

- ✓ Go to **Protect > Restore**.
- ✓ Type the remote NSA information.



- ✓ Test the connection.

Protect - Restore

Restore

Step 1. Select Restore Source

☒ Remote NSA

IP Address: 10.251.40.40

User: admin

Password: ****

Share Name: admin

☐ Internal or External Volume

Test Connection: Successfully connected to the Remote NSA.

Next

- ✓ Select the file to be restored.

Protect - Restore

Restore

Step 2. Select Restore Point

	Job Name
<input checked="" type="radio"/>	Fullbackup
<input type="radio"/>	download
<input type="radio"/>	eMule
<input type="radio"/>	zy-pkgs
<input type="radio"/>	zyfw

	Restored Time
<input checked="" type="radio"/>	2015-05-14 11:47:39

Previous Next

- ✓ Choose a folder/file to restore.

Protect - Restore

Restore

Step 3. Please select which file(s)/folder(s) to restore.

☒ Folder Chooser

☒ Selected Folder

Folder Name: /

Previous Next

Message: Ready

- ✓ Set a restore target location and start the restoring process.

Protect - Restore

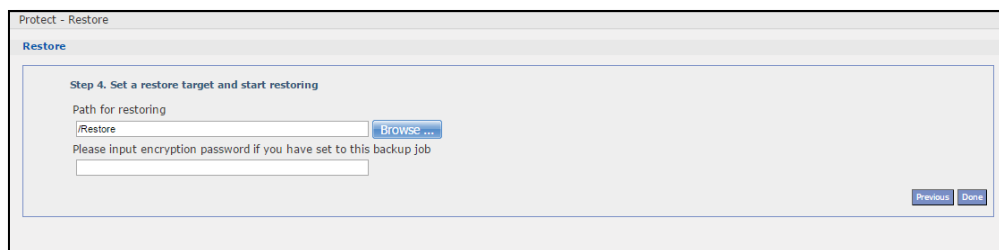
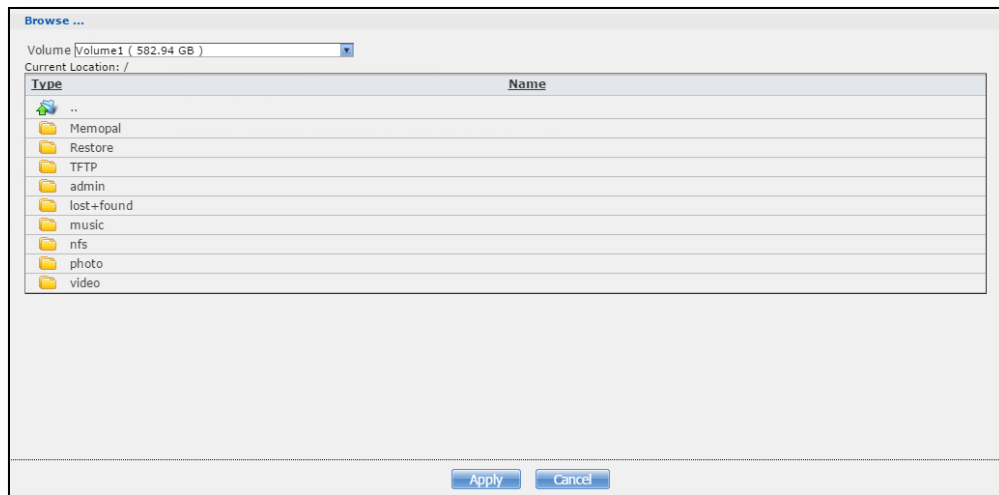
Restore

Step 4. Set a restore target and start restoring

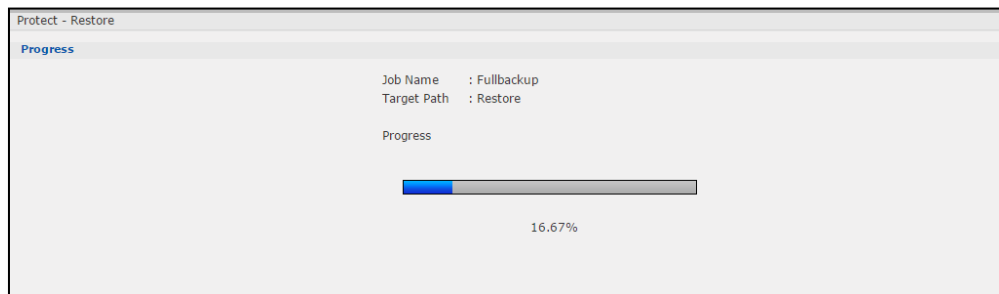
Path for restoring: Browse ...

Please input encryption password if you have set to this backup job:

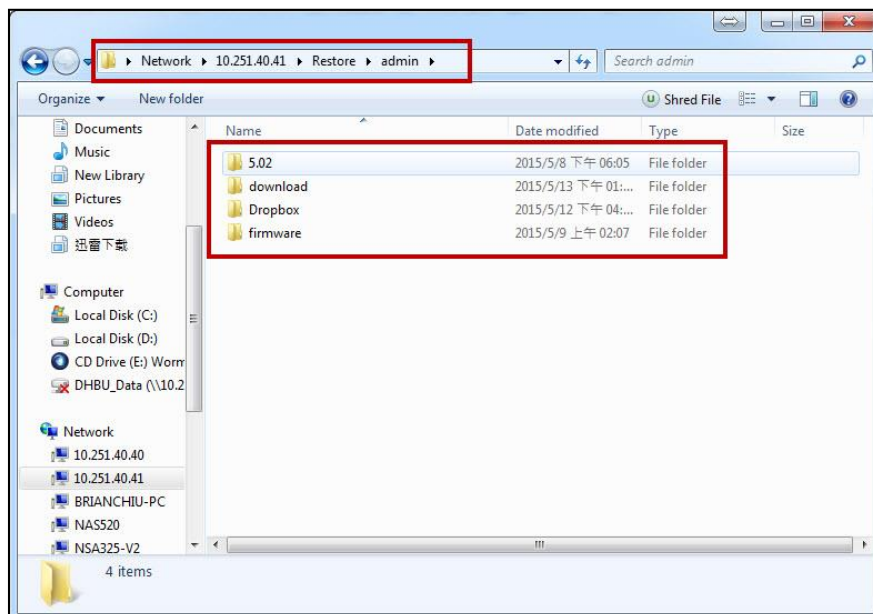
Previous Done



- ✓ Restore process is on-going.
- ✓ **The progress page will automatically close after the process is done.**



- ✓ Check the previously defined target folder to find the restored files.



11. Syslog Server

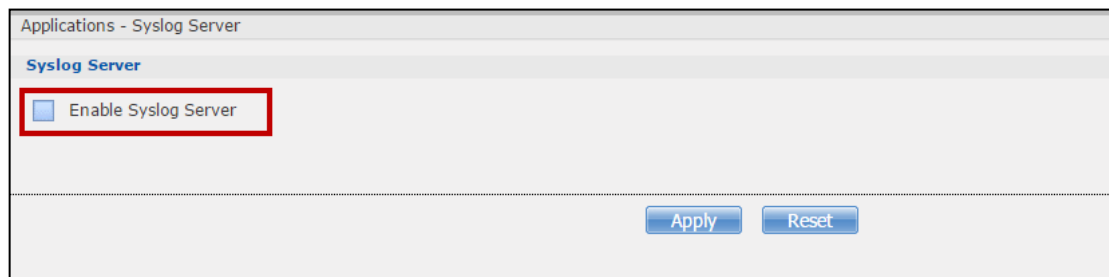
Syslog is a widely used method for message logging, and the more complex part comes in with what is logged. Syslog messages often contain important details about the health of a computer system, such as when a hard drive fills up, when someone logs in, when an application crashes, etc. Because of this, monitoring the messages in syslog files is an important part of managing a system.

One of the biggest challenges with Syslog is the volume of data generated; therefore, the Syslog Server is a great way to store logs from multiple sources into a single location.

11.1 Configuring Syslog Server on the NAS

STEPS

- ✓ Click **Applications > Syslog Server** to configure a Syslog server.
- ✓ Check **Enable Syslog Server**.



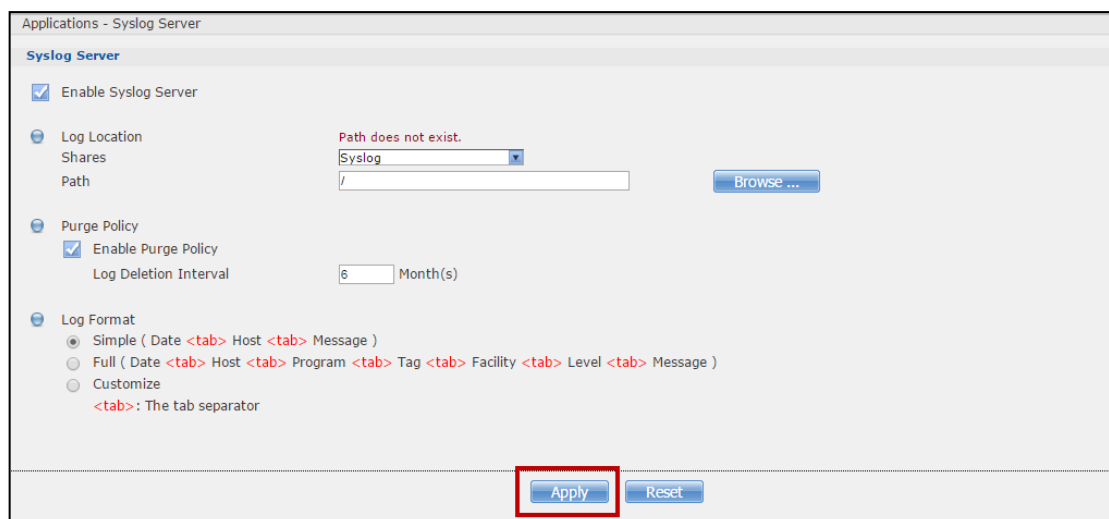
Applications - Syslog Server

Syslog Server

☐ Enable Syslog Server

Apply Reset

- ✓ In the page that opens, users can set up the **Log Location (Shares and Path)**, **Purge Policy** and **Log Format**. Click **Apply** when done.



Applications - Syslog Server

Syslog Server

☒ Enable Syslog Server

Log Location

Shares: Syslog (Path does not exist.)

Path: / (Browse ...)

Purge Policy

☒ Enable Purge Policy

Log Deletion Interval: 6 Month(s)

Log Format

☒ Simple (Date <tab> Host <tab> Message)

☐ Full (Date <tab> Host <tab> Program <tab> Tag <tab> Facility <tab> Level <tab> Message)

☐ Customize

<tab>: The tab separator

Apply Reset

11.2 Example of How Syslog Server Works

STEPS

- ✓ Enable the client's log settings and set up the server IP address to that of the NAS.

The screenshot shows the 'Log Report Configuration' window with the 'Syslog Server Setting' tab selected. Under 'Syslog Server Configuration', the 'Enable Syslog Server' checkbox is checked and highlighted with a red box. Below it, the 'Server Address' is set to '10.251.40.41'. A table below lists log categories to include in the report, with 'Syslog' selected and all categories checked.

	All Logs	User	Shares	Services	System	Network	Storage	Applications	Backup	Auto Upload
Syslog	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

- ✓ Users can check the log file(s) on the NAS via clicking **View Files**.

The screenshot shows the 'Applications - Syslog Server' configuration window. The 'Log Location' section is highlighted with a red box, showing a 'View Files' link. Below it, the 'Purge Policy' is enabled with a deletion interval of 6 months. The 'Log Format' is set to 'Simple'.

Log Location: [View Files](#)

Shares: Syslog

Path: /

Purge Policy: ☒ Enable Purge Policy, Log Deletion Interval: 6 Month(s)

Log Format: ☒ Simple (Date <tab> Host <tab> Message)

The screenshot shows the 'Share Browsing' window with the current location set to '/Syslog'. A table lists the contents of the directory, with a folder named '201505' highlighted by a red box.

Type	Name	Size	Modified Date
Folder	201505		2015-05-14 13:56:13

- ✓ Users can then see the log file(s) and download it.

The screenshot shows the 'Share Browsing' window with the current location set to '/Syslog/201505'. A table lists the contents of the directory, with a file named '10.251.40.40_20150514.txt' highlighted by a red box.

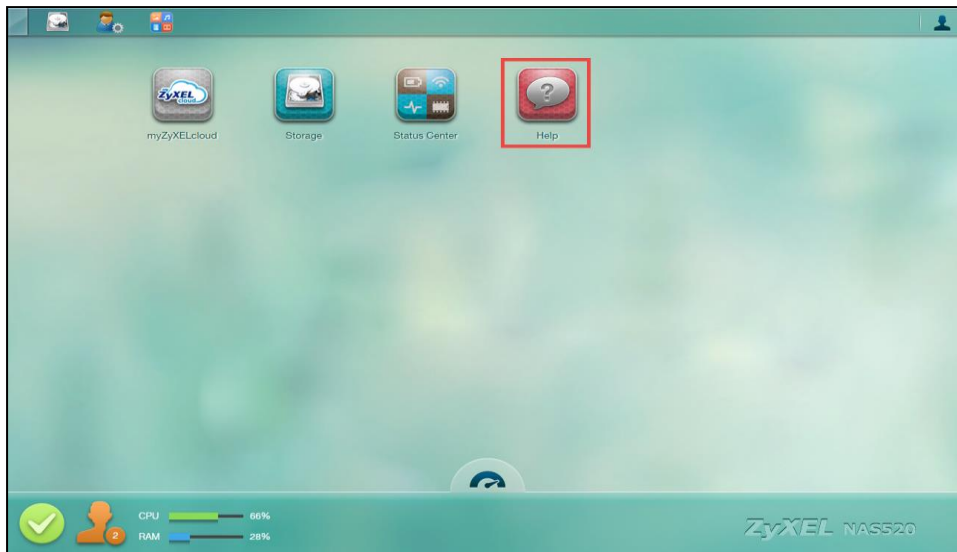
Type	Name	Size	Modified Date
File	10.251.40.40_20150514.txt	197.00 Bytes	2015-05-14 13:56:16

- ✓ Open the log file. The log can be viewed in the format that the user has set up.

```
10.251.40.40_20150514.txt x
1 May 14 13:46:06 NSA325-v2 msg="User admin has logged out from Web!" note="User: admin" cat="Login"
2 May 14 13:46:09 NSA325-v2 msg="User admin has logged in from Web!" note="User: admin" cat="Login"
```

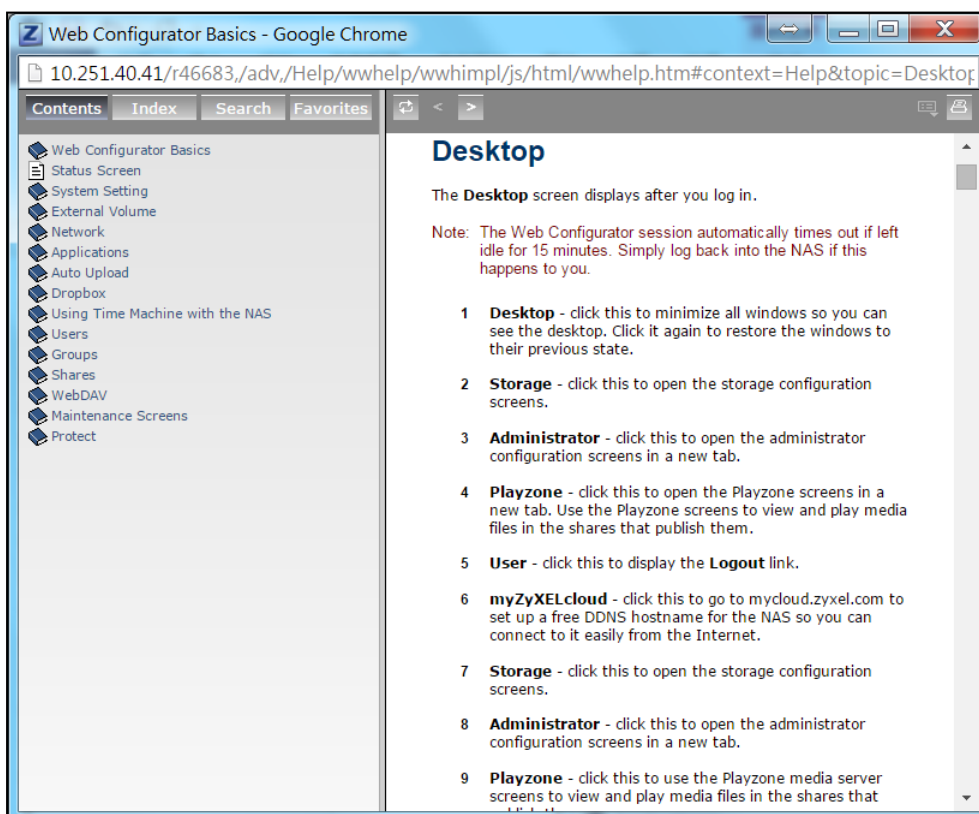
12. Help

Click on this to display the NAS's embedded help system screens.



Desktop > Help

Web Help to easy understand for each screen.



Help screen

121 FAQ

1. What is RAID?

RAID stands for **R**edundant **A**rray of **I**nexpensive **D**isks. It takes two or more hard disks achieve greater levels of performance, reliability and/or larger volume of data size.

2. What kind of RAID is supported by the NAS520/NAS326?

NAS support JBOD, RAID0, RAID1.

3. Which file system is supported by the ZyXEL NAS series?

Internal file system: EXT4

External file system: FAT32, EXT2, EXT3, EXT4 and NTFS.

4. Which kind of multimedia server does the NAS support?

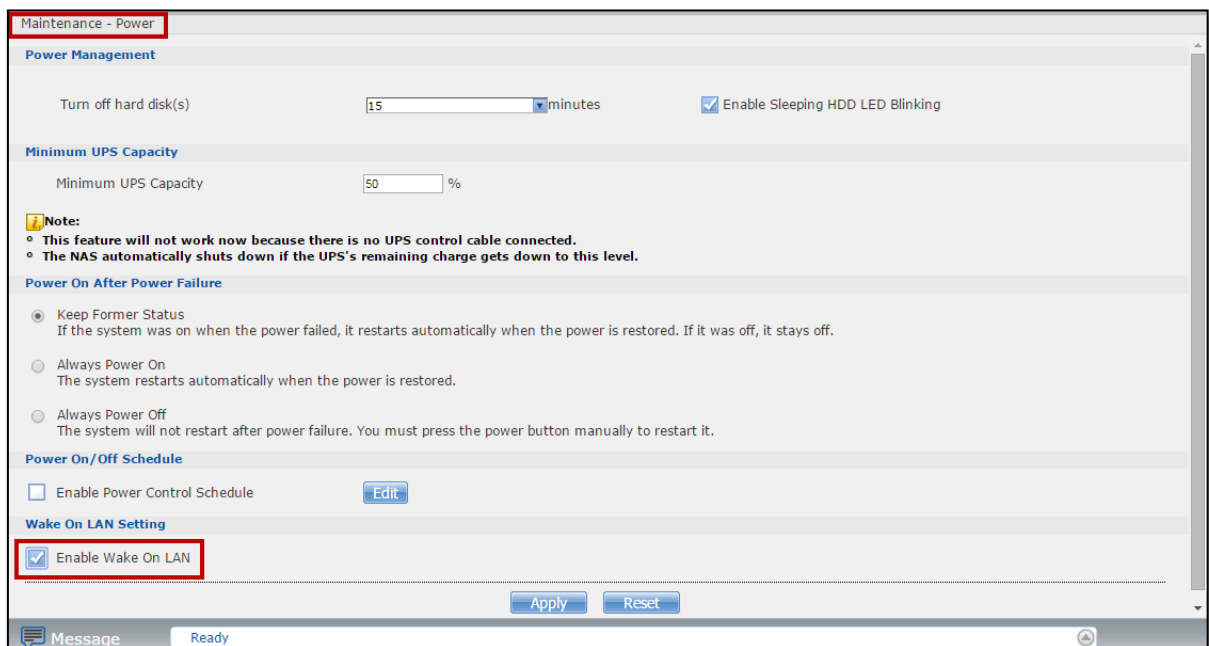
ZyXEL NAS series supports Logitech® Media Server, Twonky server, UPnP AV Server, and iTunes Server.

5. Does the ZyXEL NAS series support a DLNA media server?

Yes. The ZyXEL NAS series supports a DLNA 1.5 compliant media server.

6. What is the feature “Wake On LAN”?

You can turn on the ZyXEL NAS series through its wired Ethernet connection after enabling Wake On LAN. To use Wake On LAN from a computer on your LAN, install a program such as Wake On LAN EX or other Wake On LAN programs that supports sending magic packets. You can also use Wake On LAN from a remote location if the router in front of the ZyXEL NAS series that supports sending magic packets.



7. Which types of video file formats are supported by the ZyXEL NAS series?

ZyXEL NAS series supports the following video formats: MPEG-1/MPEG-2, MPEG-4, AVI, DivX, Motion JPEG, Quick Time Video, RealMedia, Ogg, Matroska, ASF, Windows Media Video and ISO. Subtitles are also supported by the NAS.

8. Which types of audio file formats are supported by the NAS?

ZyXEL NAS series supports the following audio formats: MP3, Ogg Vorbis, RealMedia, WAVE, Windows Media Audio, Matroska, Monkeys Audio, MP1, MP4, PCM, LPCM, DTS, AC3, Free Lossless Audio Codec, Au, AAC, 3GPP, AIFF, RIFF-based MIDI and Playlist.

9. Which types of image file formats are supported by the ZyXEL NAS series?

ZyXEL NAS series supports bitmap, JPEG, and PNG.

10. Which types of web browsers are supported by the ZyXEL NAS series?

ZyXEL NAS series supports Internet Explorer 6.0 and later versions, and Firefox 2.00 and later versions. Currently, ZyXEL NAS series does not support the Safari web browser.