



# NAS540/NAS542

## Application Notes

Version 1.02  
March, 2018



# Contents

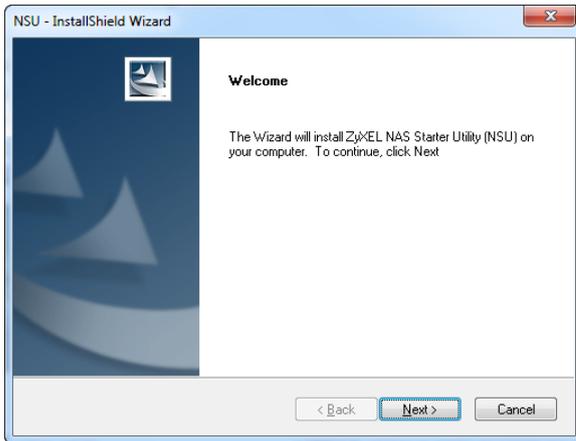
1. NAS Starter Utility .....	4
1.1 NAS Starter Utility Installation .....	4
1.2 NAS Initialization .....	5
1.3 Network Setting .....	6
1.4 DeskTop .....	7
1.5 Network Drive .....	8
1.6 Shared Folder .....	10
1.7 myZyXELcloud .....	11
1.8 Run the Initialization Wizard .....	12
2. myZyXELcloud-Agent .....	13
2.1 Sign in .....	13
2.1.1 Sign in with Facebook .....	13
2.1.2 Sign in with Google .....	15
2.1.3 Sign up .....	16
2.2 Pair NAS .....	17
2.3 Unpair NAS .....	21
3. Storage .....	23
3.1 Create Volume .....	24
3.1.1 Create single volume on RAID .....	24
3.1.2 Create Disk Group .....	26
3.2 Repair volume .....	29
3.3 Delete Volume .....	31
4. Administrator .....	32
4.1 Network .....	33
4.2 Auto-upload Service .....	36
4.3 Dropbox .....	42
4.4 Using the zDownload Folder .....	47
4.5 WebDAV .....	48
4.6 Media Server .....	51
5. PlayZone .....	54
5.1 File Browser .....	55
5.2 Application Zone .....	56

5.3 Playzone Settings .....	57
5.4 Music.....	58
5.5 Photo.....	59
5.6 Video.....	60
6. Status Center .....	62
7. External Volume .....	63
8. APP Center .....	65
8.1 Gallery.....	68
8.3 NFS .....	74
9. Help .....	78
9.1FAQ .....	79

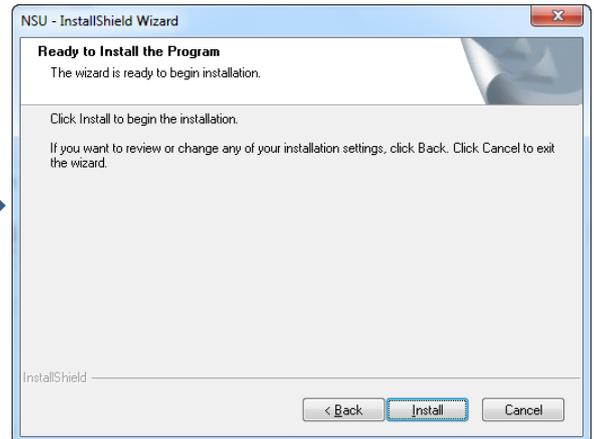
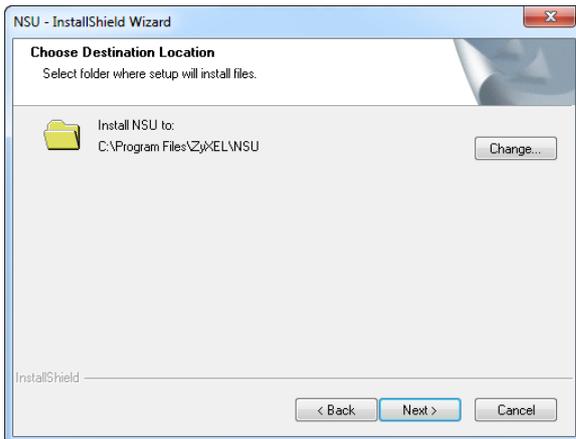
# 1. NAS Starter Utility

## 1.1 NAS Starter Utility Installation

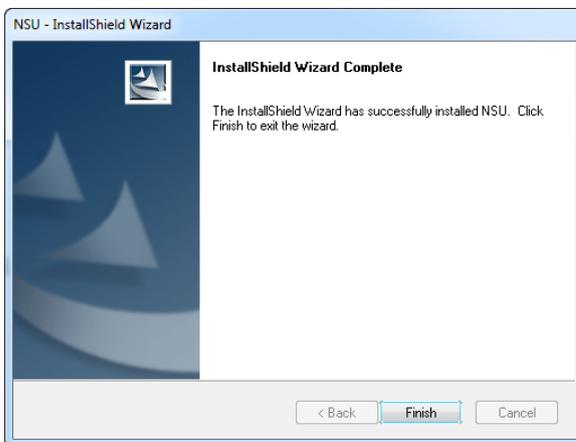
After you install a new hard drive on the NAS, please use the NAS Starter Utility to discover and access the NAS to assign an IP address by the DHCP server or a static option. The steps are shown below:



*Double-click setup.exe.  
NSU\_2.10\_build\_1061 then click "Next" to  
begin the installation*



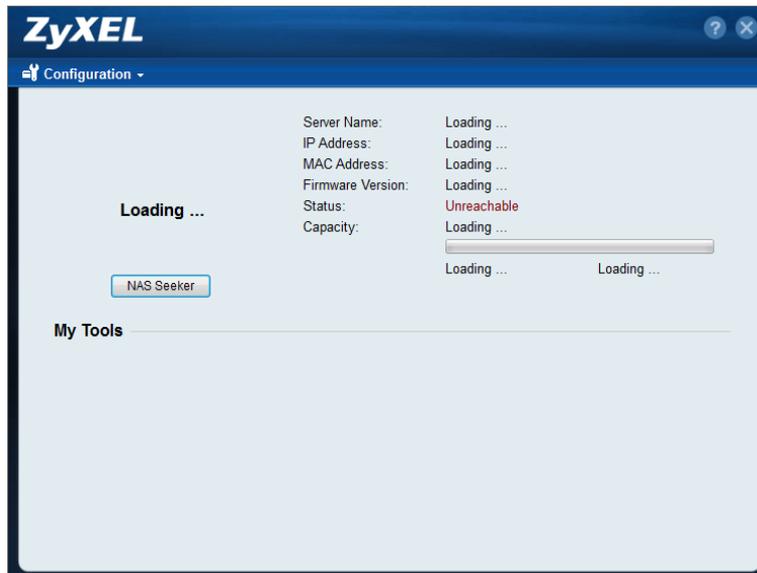
*Select install folder*



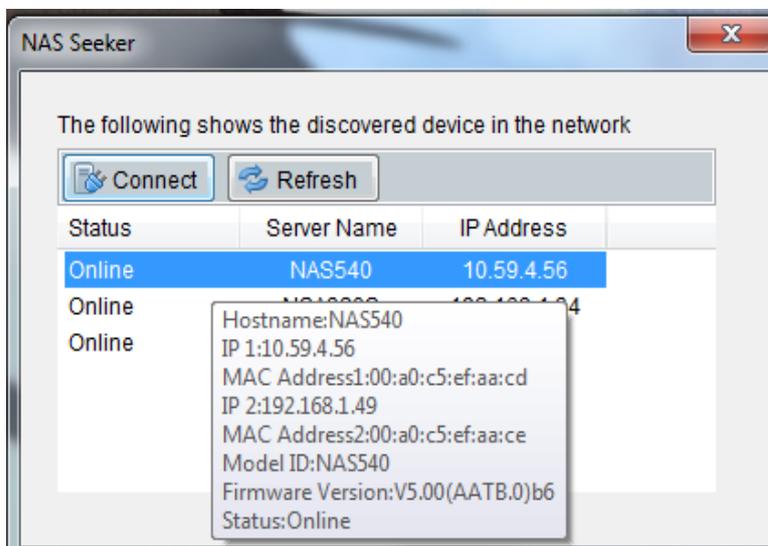
*Finish Installation*

## 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*



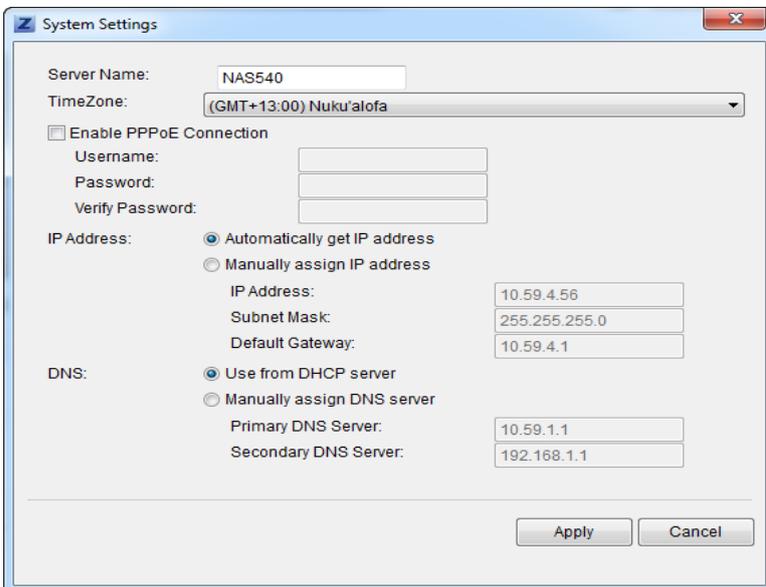
*Select NAS540*

### 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

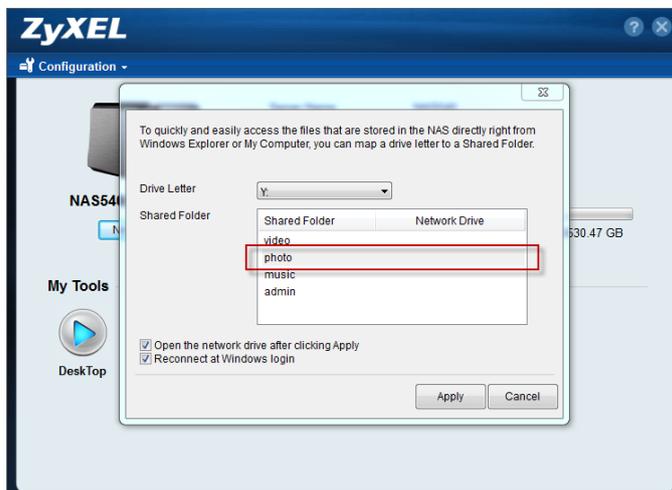
In the main NAS Starter Utility screen click **Network Drive** to add the NAS as a network drive in your computer's Windows Explorer.



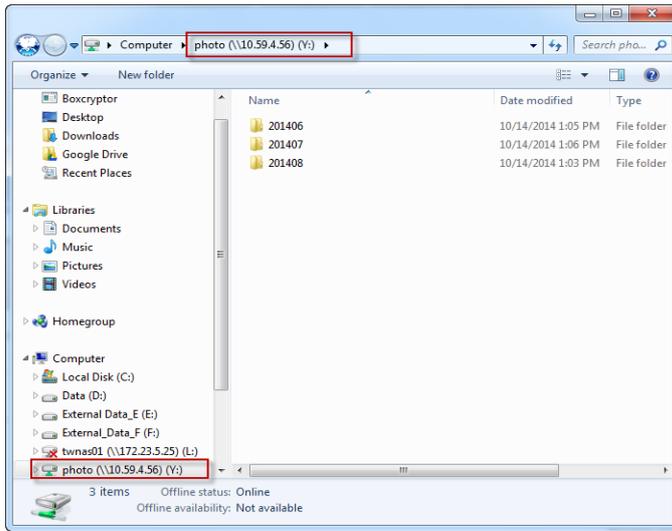
*Click Network Drive*



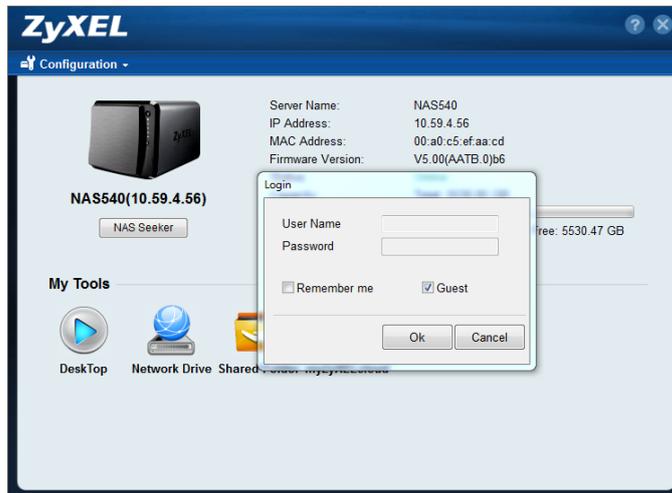
*Type user name and password*



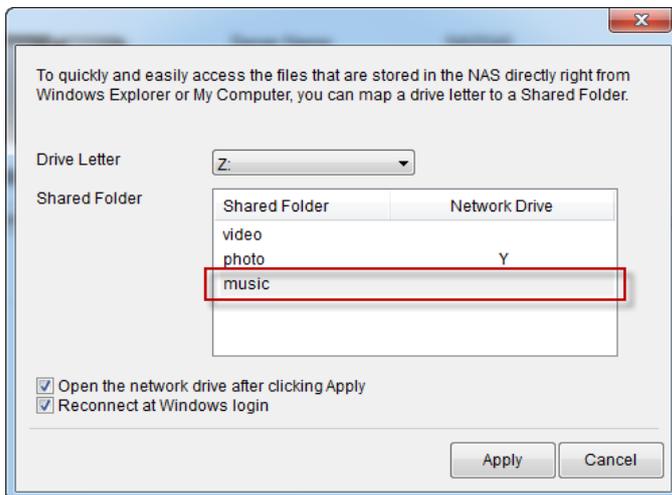
*Select shared folder*



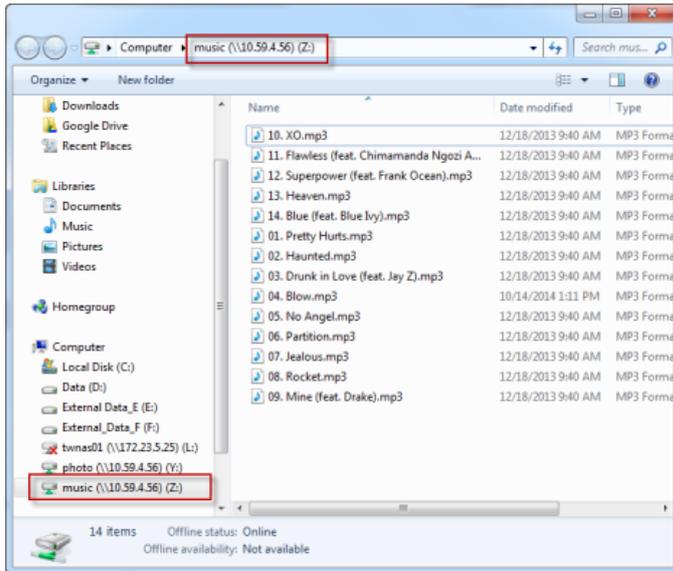
Check the Network map drive



Map the shared folder via Guest



Select shared folder



Check the Network map drive

## 1.6 Shared Folder

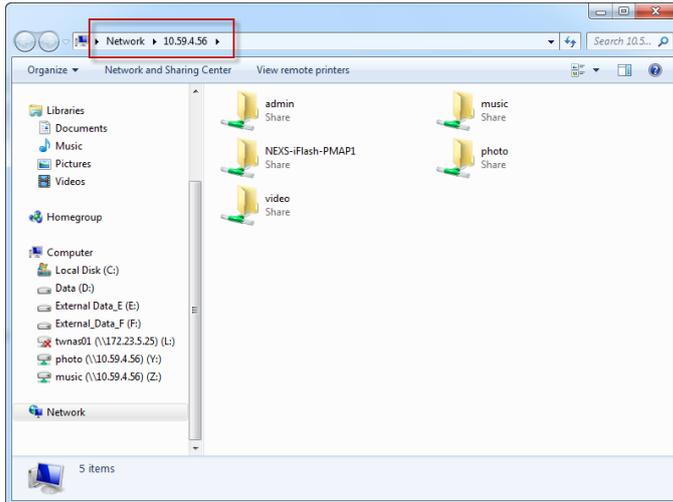
Click this to log into the NAS's file directory in Windows Explorer.



Select the Shared Folder



Type user name and password



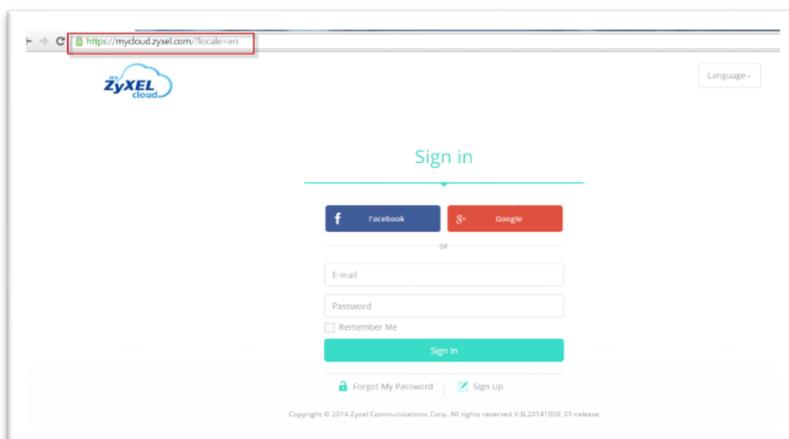
Check NAS's file directory in Windows Explorer

## 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.



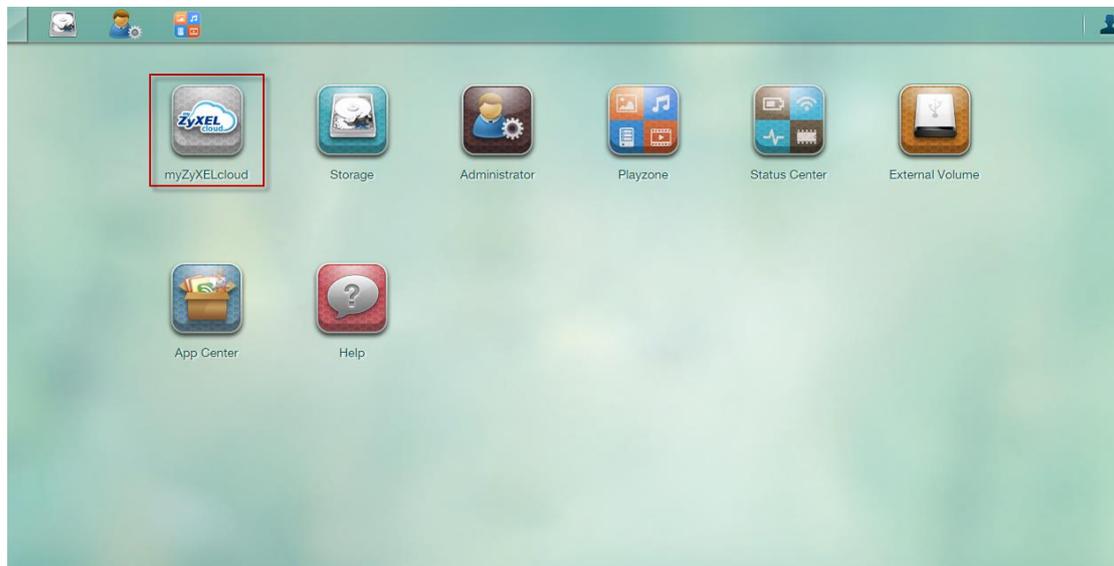
*Run Initialization*



*Desktop screen*

## 2. myZyXELcloud-Agent

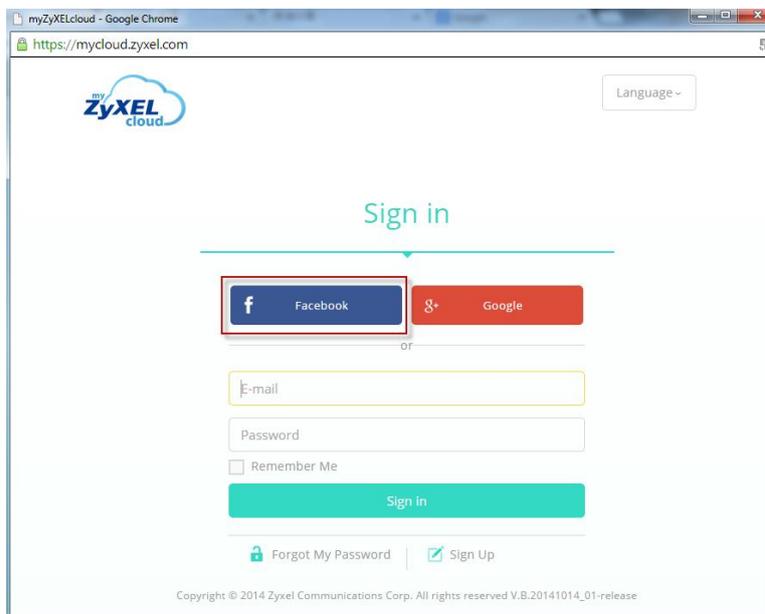
Provide a solution for remote application management and access your ZyXEL network storage accessory.



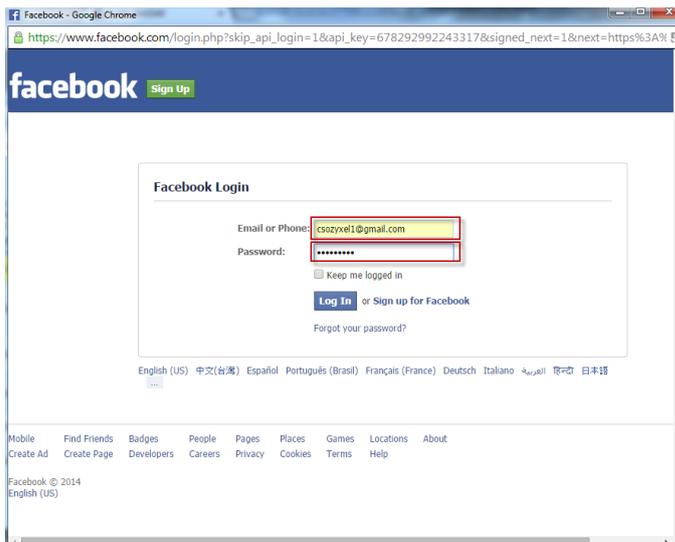
DeskTop -> myZyXELcloud

### 2.1 Sign in

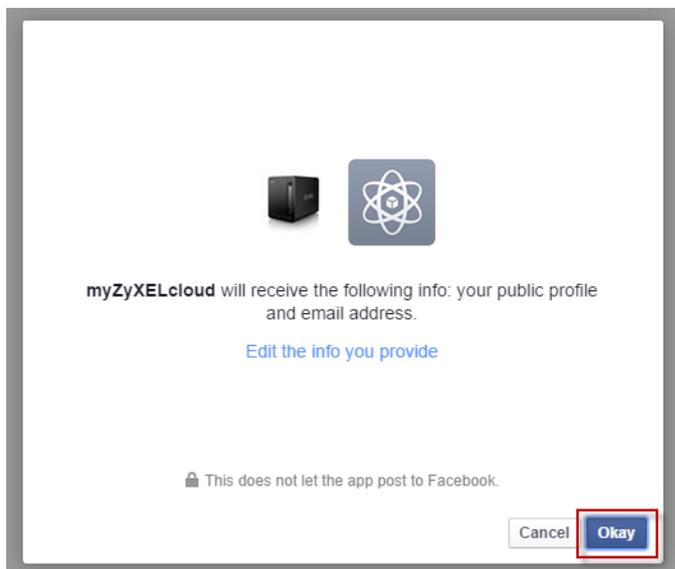
#### 2.1.1 Sign in with Facebook



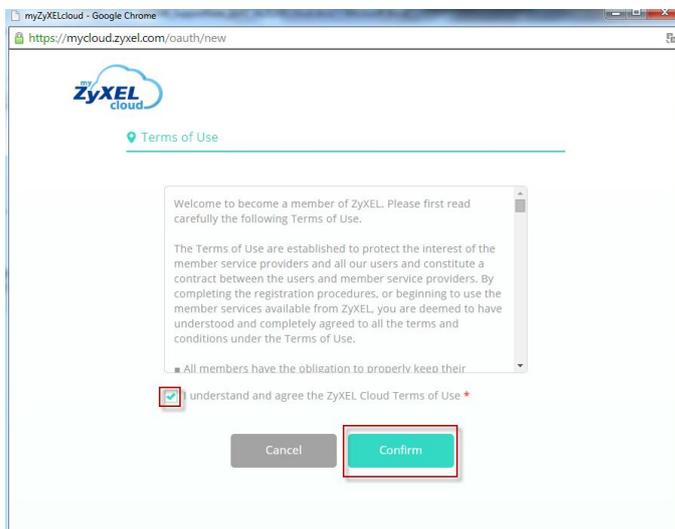
Click on the **Facebook** button



Login to Facebook with your account



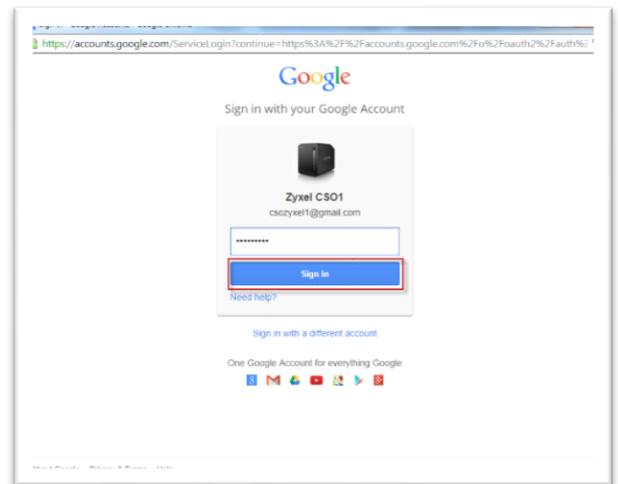
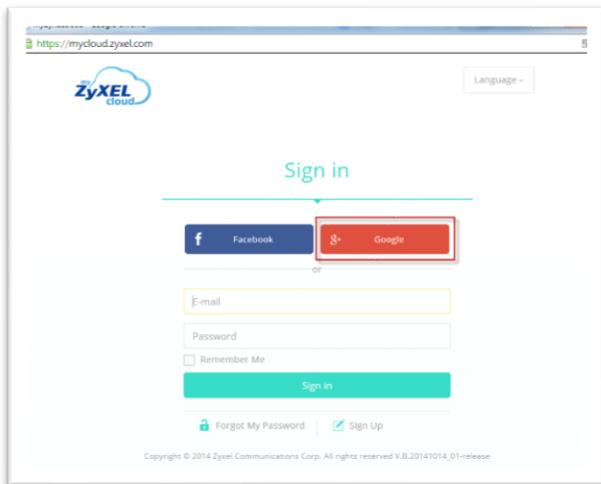
Confirm myZyXELcloud will receive some information



Confirm the Terms

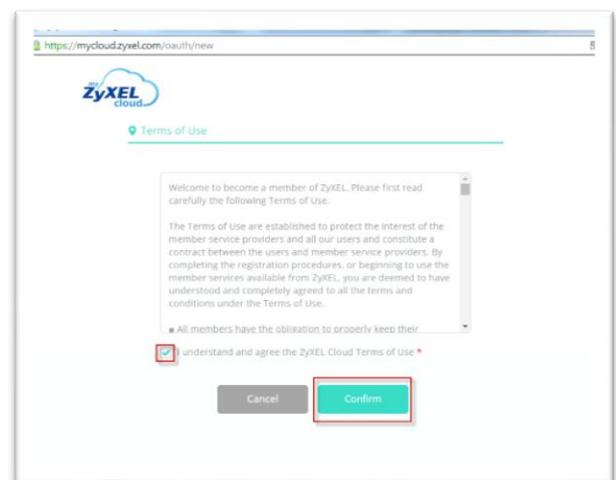
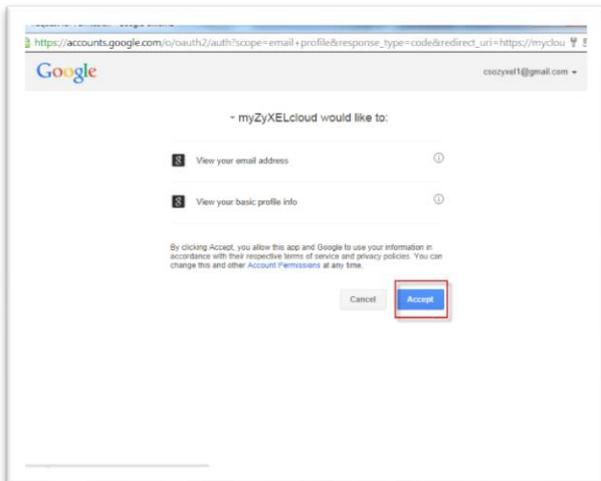
## 2.1.2 Sign in with Google

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



Click on the **Google** button

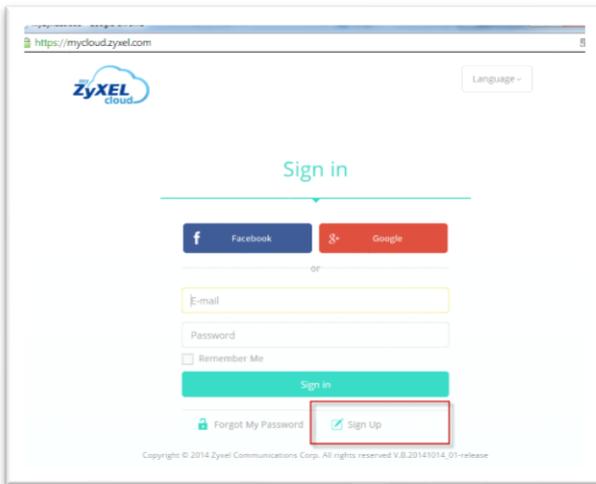
Confirm that myZyXELcloud will receive some information as well as the terms.



Confirm terms

## 2.1.3 Sign up

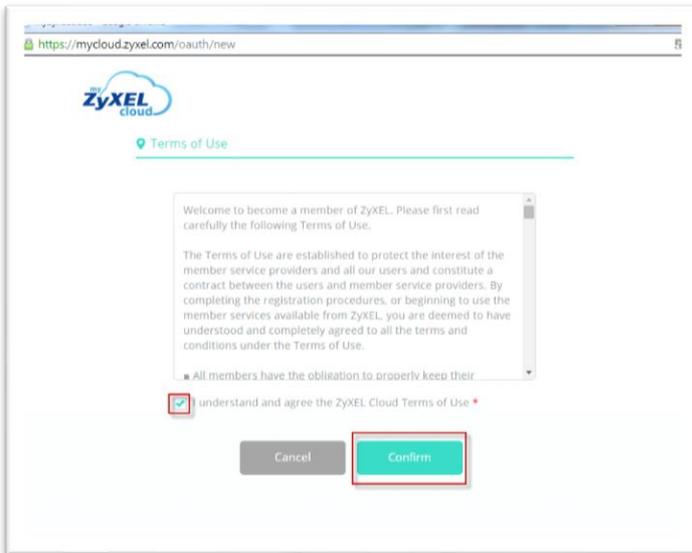
Click on **sign up**.



Sign up in this screen

Fill-in the fields on this page.

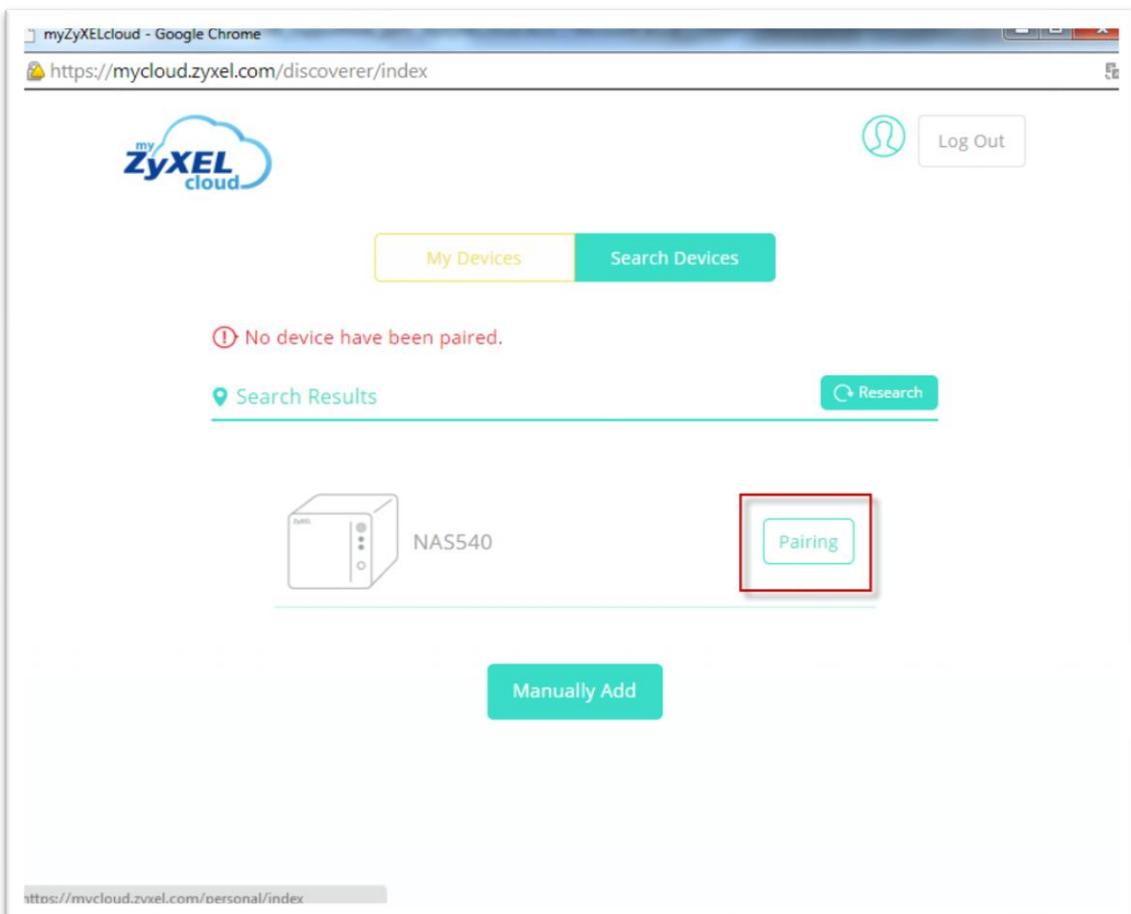
Sign up screen



Confirm the Terms

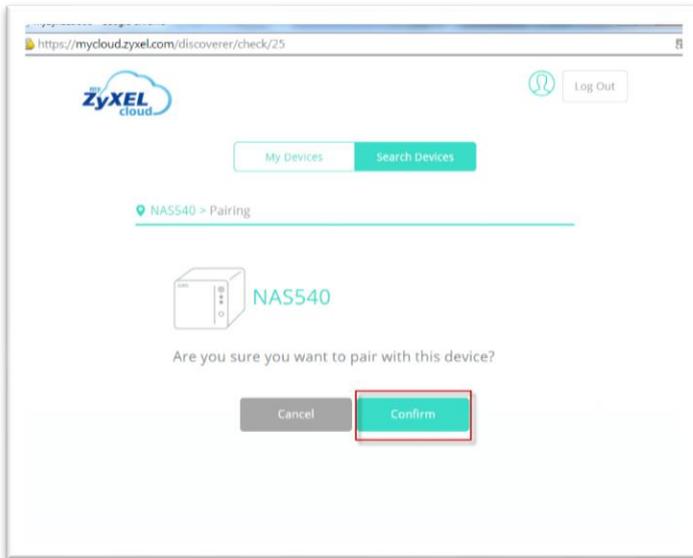
## 2.2 Pair NAS

myZyXELcloud will search for the NAS in the network.

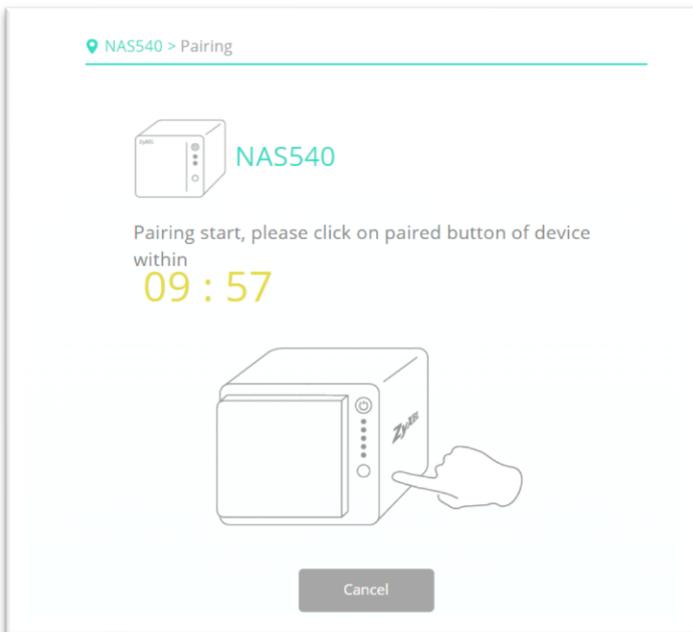


Click on the **Pairing** button

Confirm to pair with this NAS.

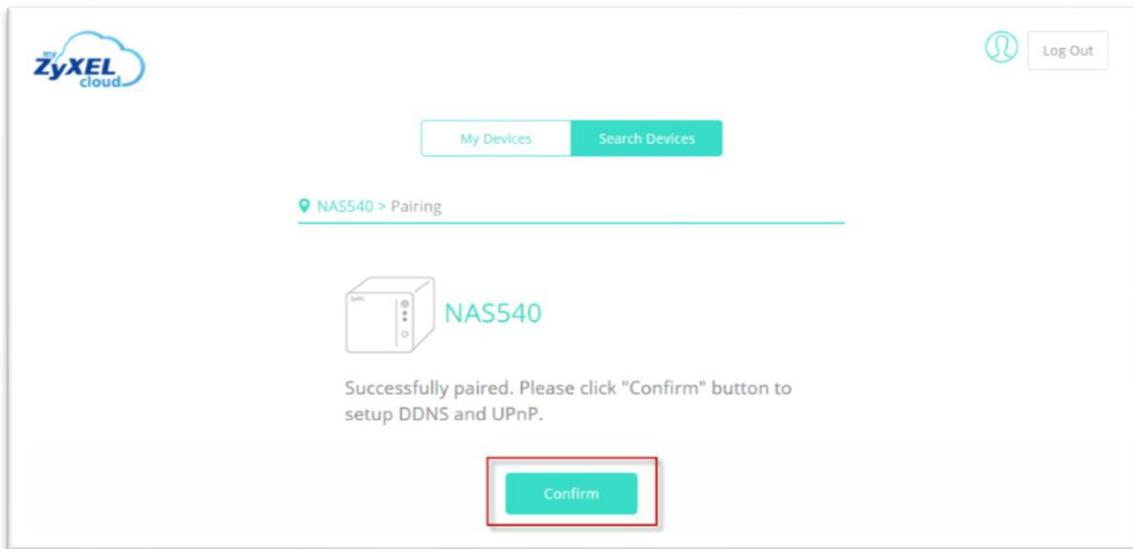


Press the **confirm** button



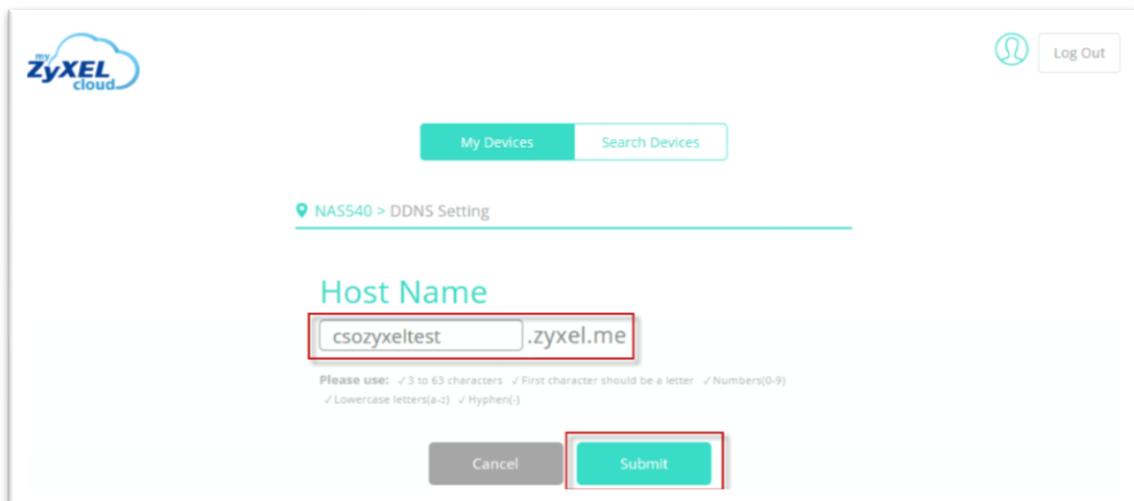
Click on the copy/sync button  
within 10 minutes

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



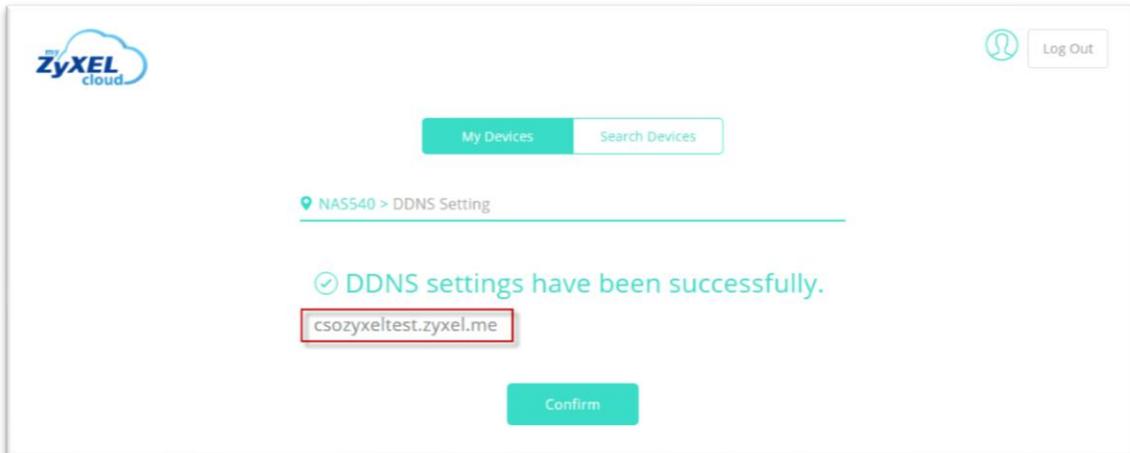
*Successfully paired*

Fill-in the host name that you want.



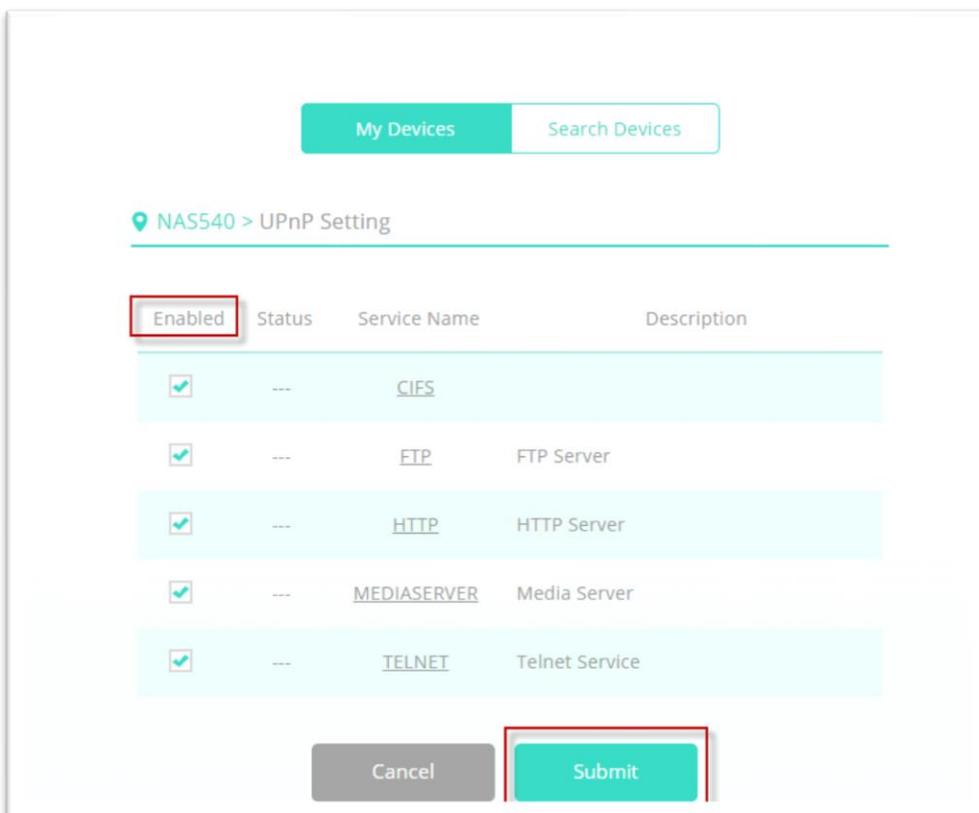
*Submit*

DDNS settings have been completed successfully.



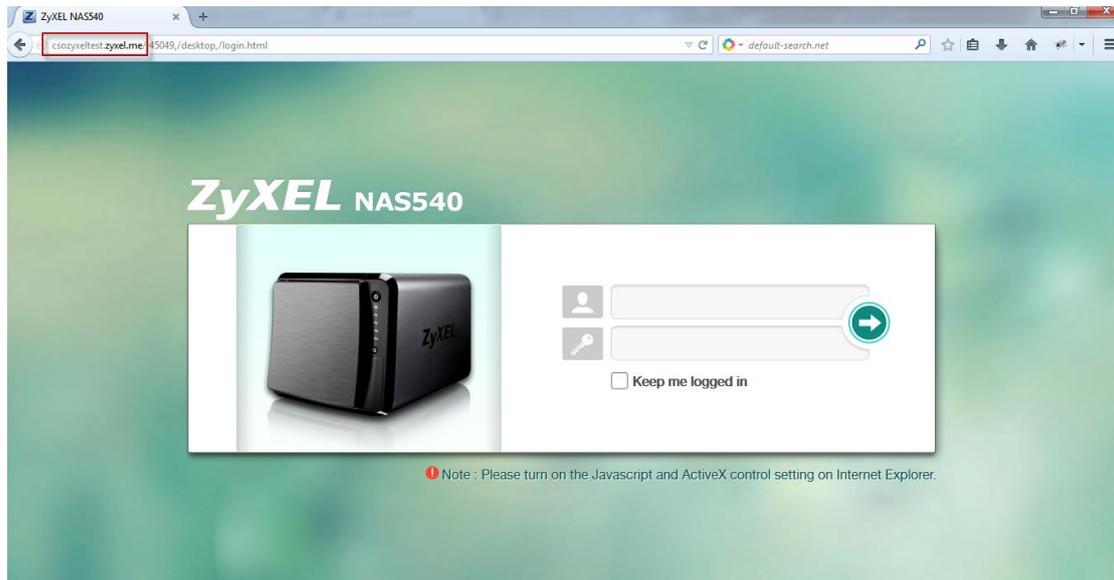
Confirm your DDNS

Setup the UPnP setting.



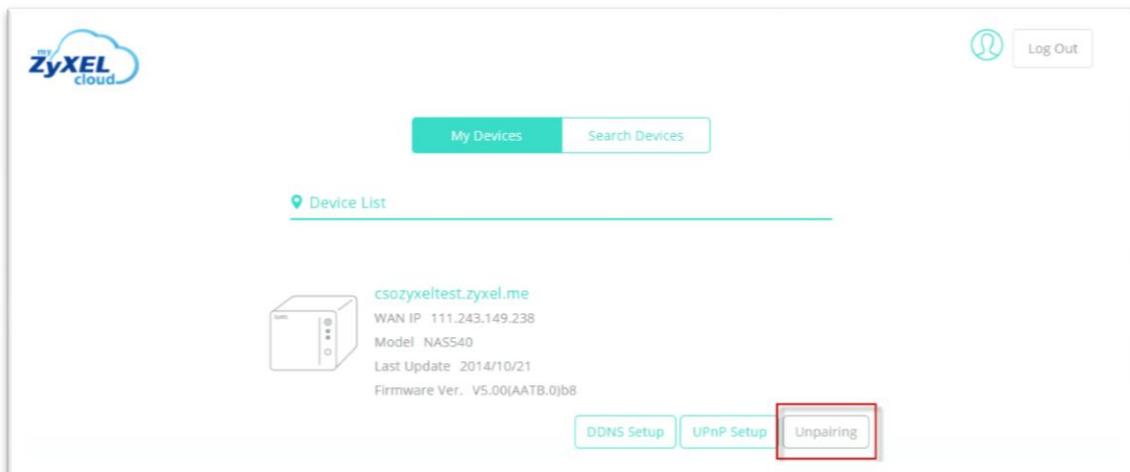
UPnP Setting screen

Access GUI of the NAS via DDNS from the Internet.



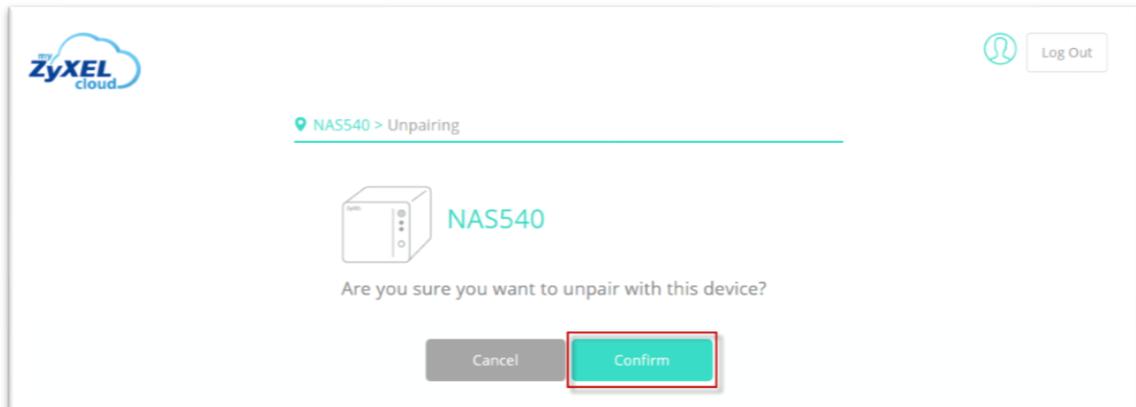
Successfully accessed

## 2.3 Unpair NAS



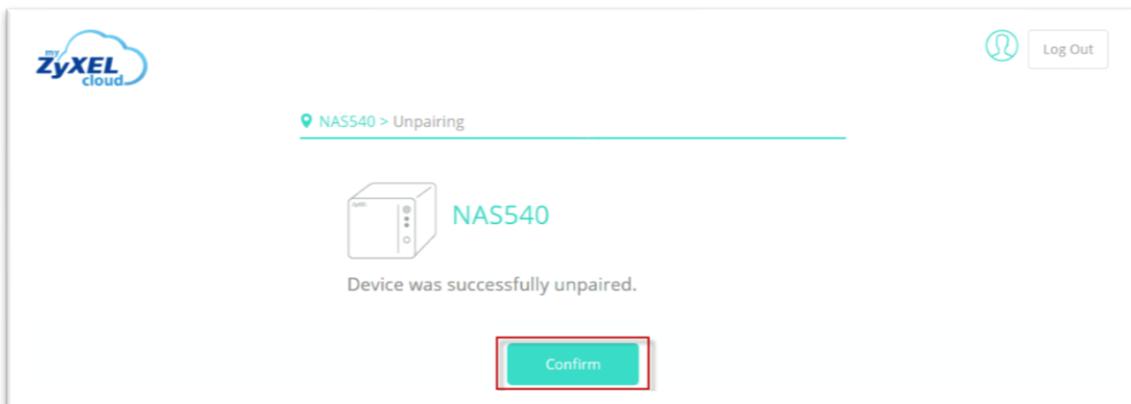
Press the **Unpairing** button

Confirm that you will unpair this NAS.



Press the **Confirm** button

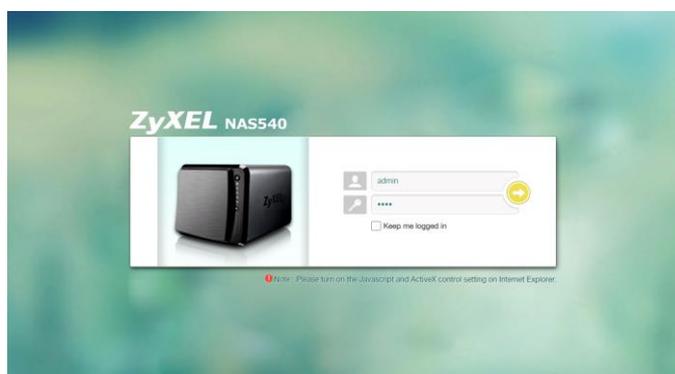
Device was successfully unpaired.



Successfully unpaired

### 3. Storage

Click on this to open the storage configuration screens.



Type user name and password



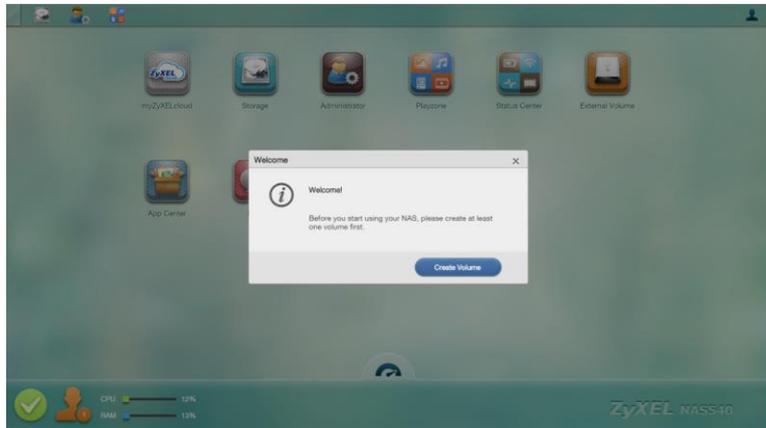
Click on **Storage**

### RAID Types

RAIDTYPE	NO. OFHDD	NO. OF HDDALLOWED TO FAIL	DESCRIPTION	CAPACITY
Basic	1	0	Use <b>Basic</b> with one disk. It has no fault tolerance.	1 x (HDD size)
JBOD	2-4	0	Use <b>JBOD</b> 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 <b>RAID 0</b> 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 <b>RAID 1</b> 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 <b>RAID 5</b> 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 <b>RAID 6</b> 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 <b>RAID 10</b> with four disks to get better performance than RAID 6, with slightly less data protection.	(No. of HDD / 2) x(smallest HDD size)

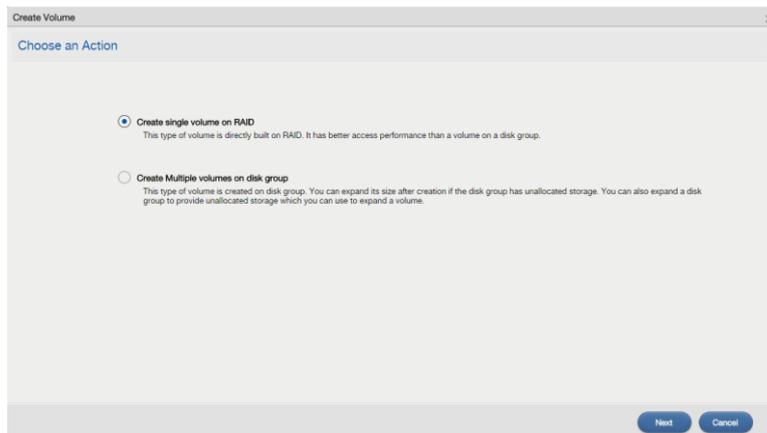
### 3.1 Create Volume

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.

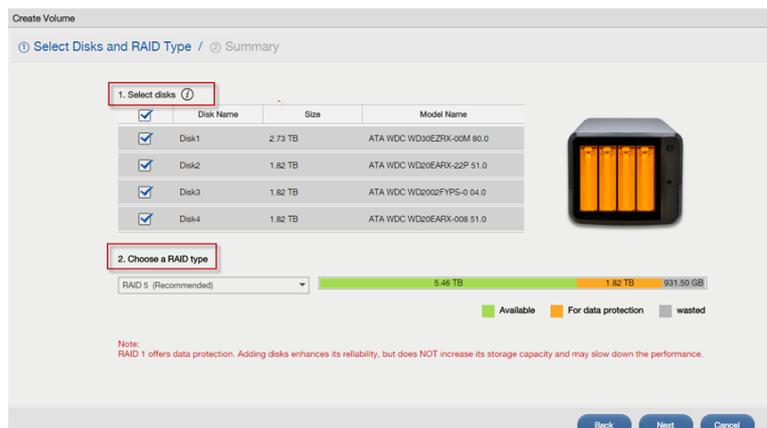


Select **Create single volume on RAID**

#### 3.1.1 Create single volume on RAID

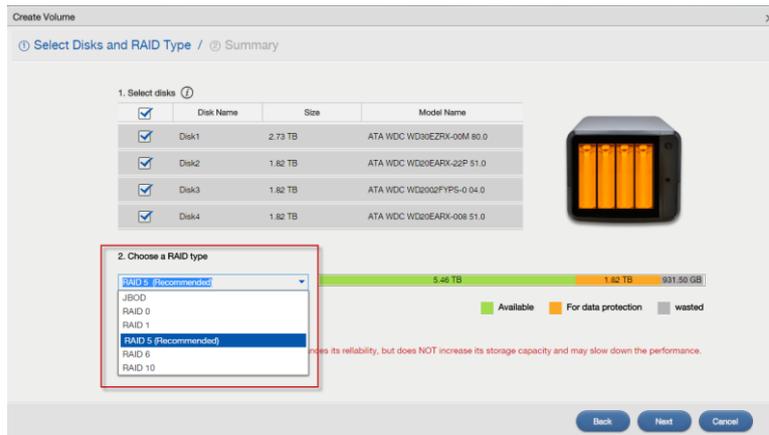
Select disks and RAID type for your single volume.

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

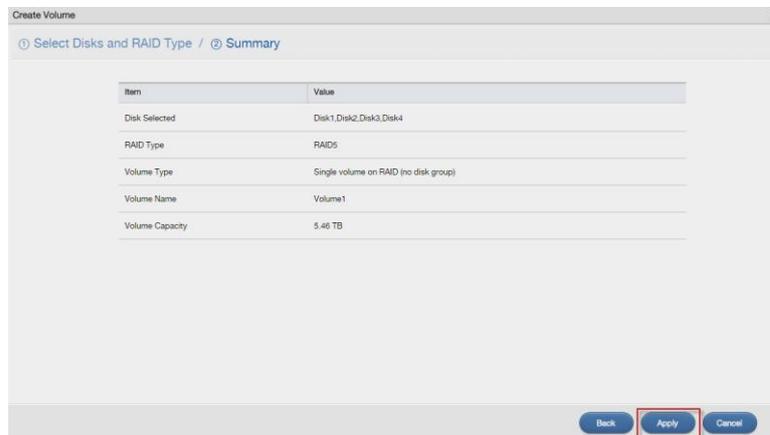


Select disks and RAID type

Select a RAID type from the drop-down list.



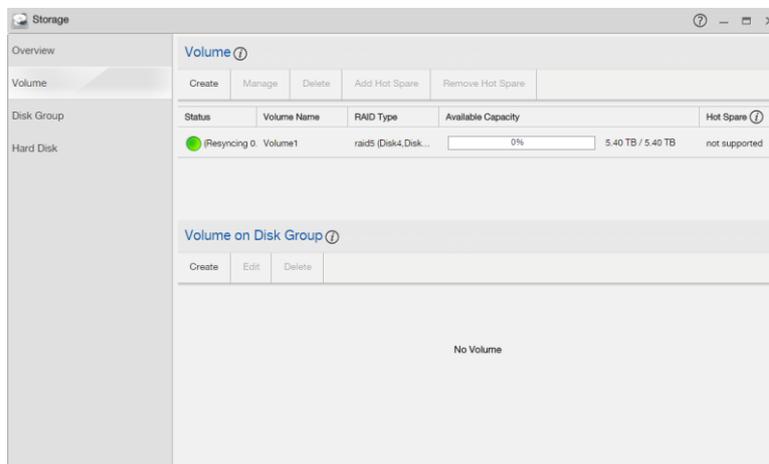
*NAS support JBOD, RAID0, RAID1, RAID5, RAID6, RAID10*



*Volume information*

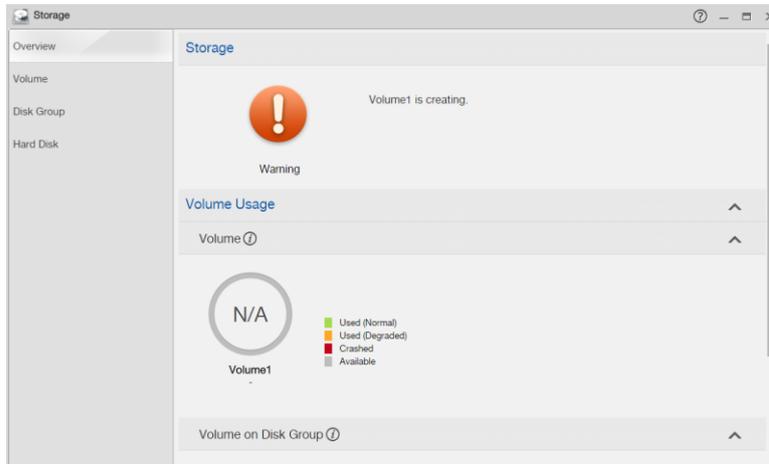
Go to **Desktop -> Storage**

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*

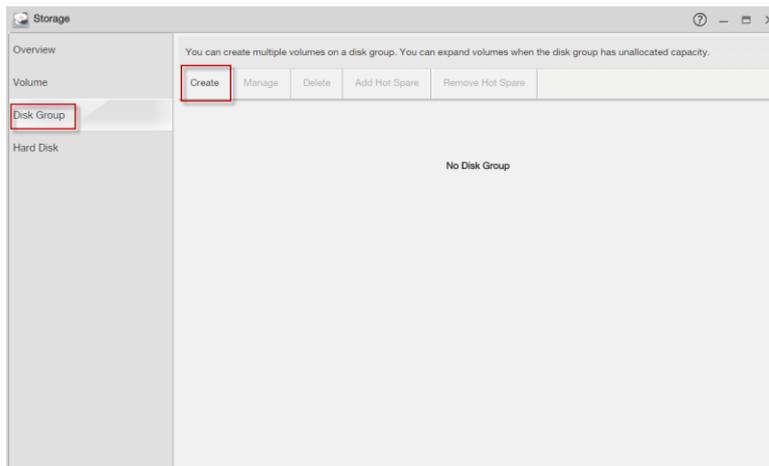
The Storage Overview screen displays the current storage configuration and volume usage.



Storage status

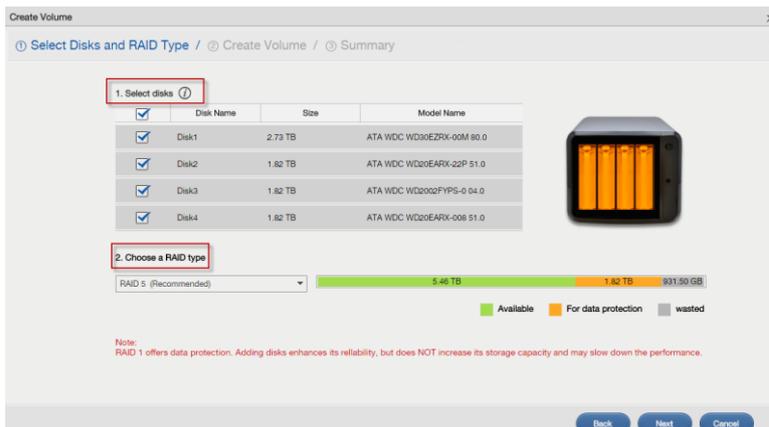
### 3.1.2 Create Disk Group

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



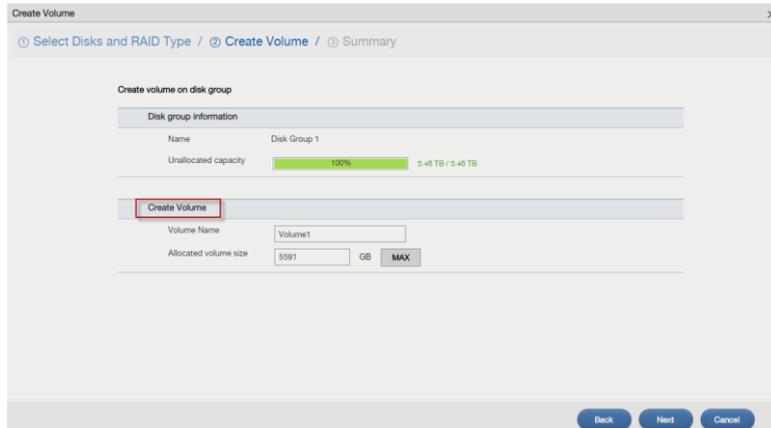
Storage->Disk Group

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.

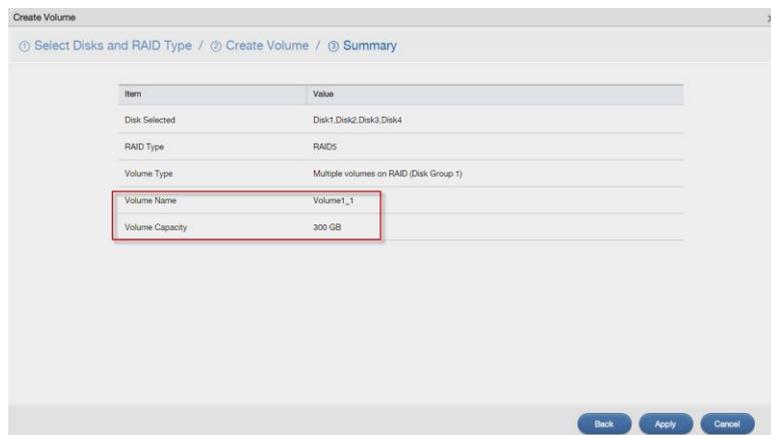


Select disks and RAID type

Create a volume in your disk group.

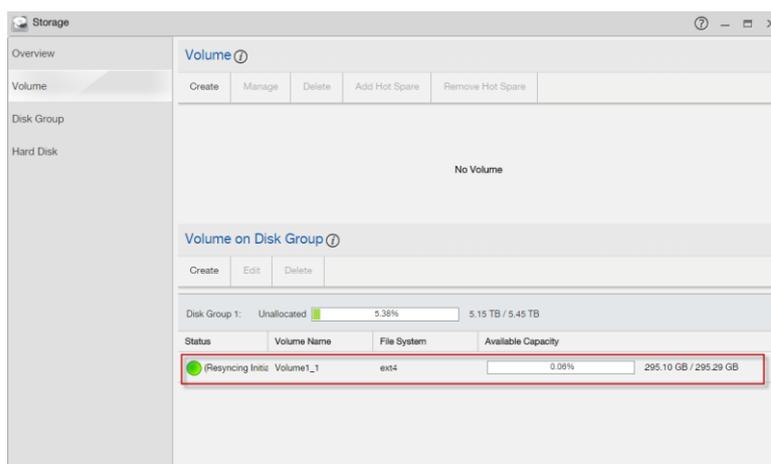


*Setting your volume for this disk group*



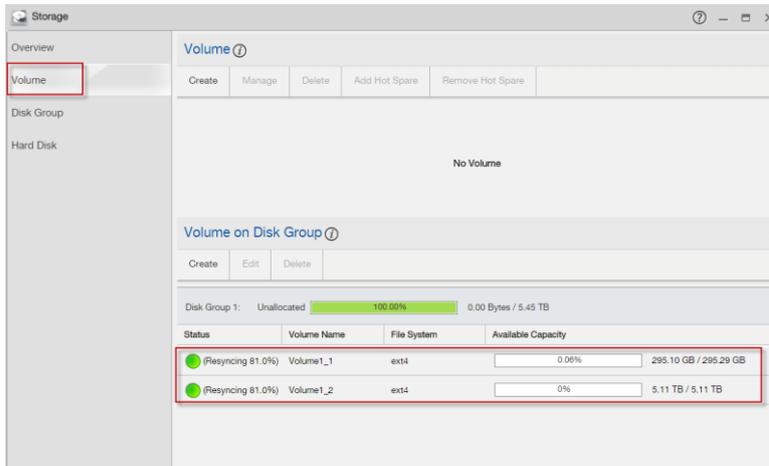
*Disk Group type and volume information*

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



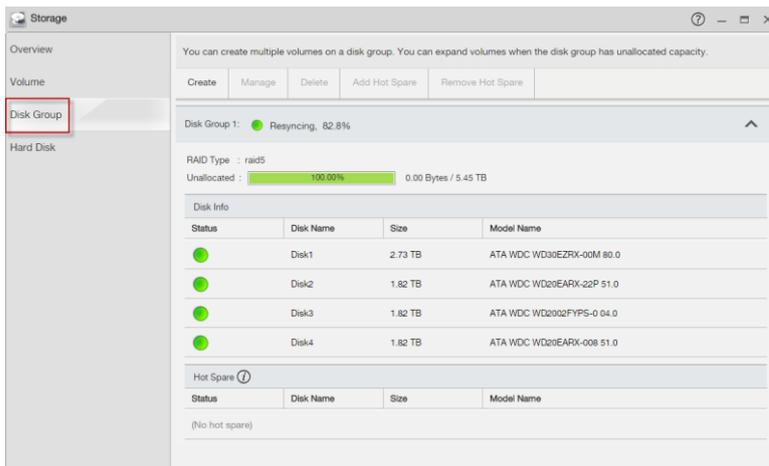
*Check volume of disk group status*

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*

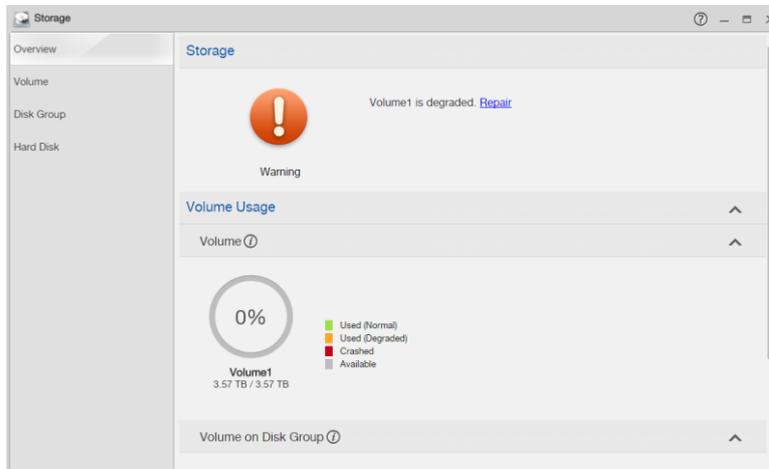
The Storage Overview screen displays the current storage configuration and volume usage.



*Check storage status*

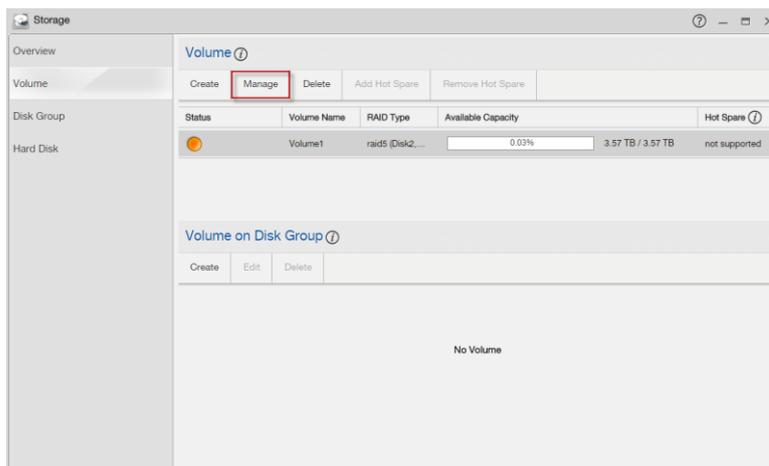
### 3.2 Repair volume

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



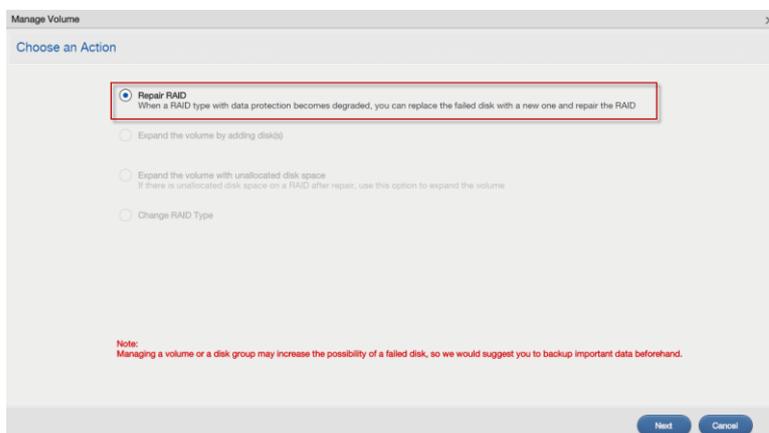
*Volume degraded*

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



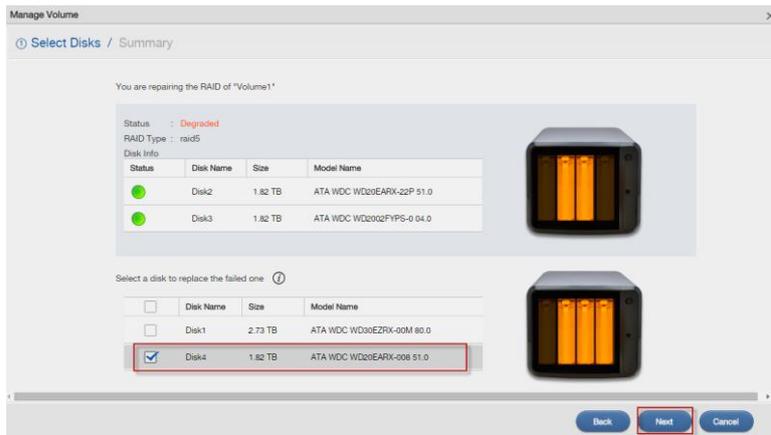
*Click Manage*

Select **Repair RAID**.



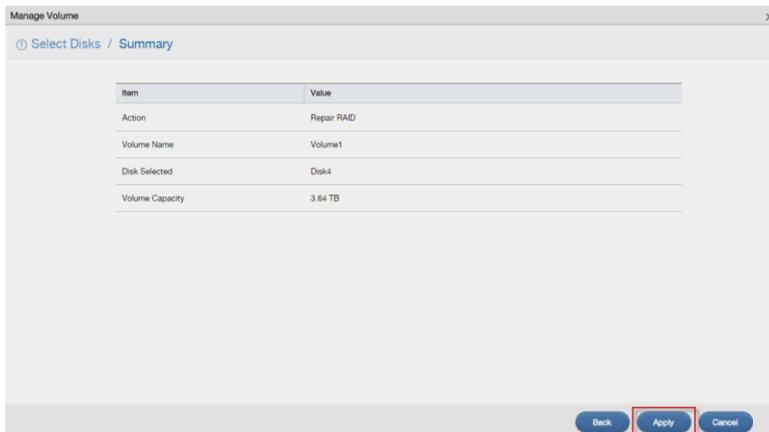
*Repair RAID*

Select which disk to repair the RAID volume.



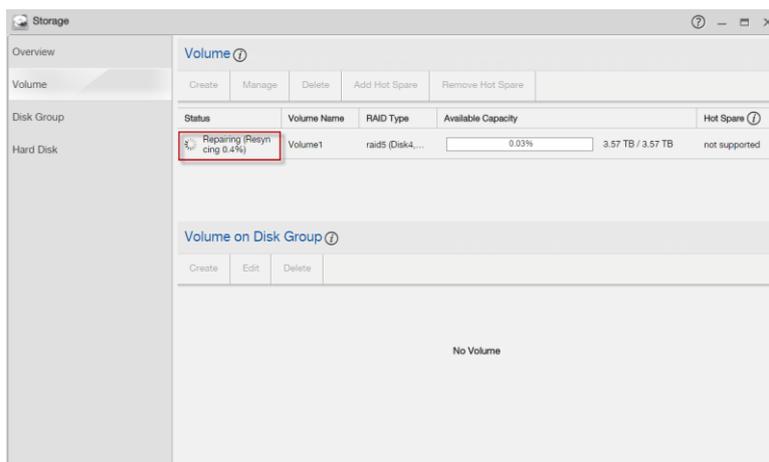
Select disk

Repair information.



Check the information and click on **Apply**

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

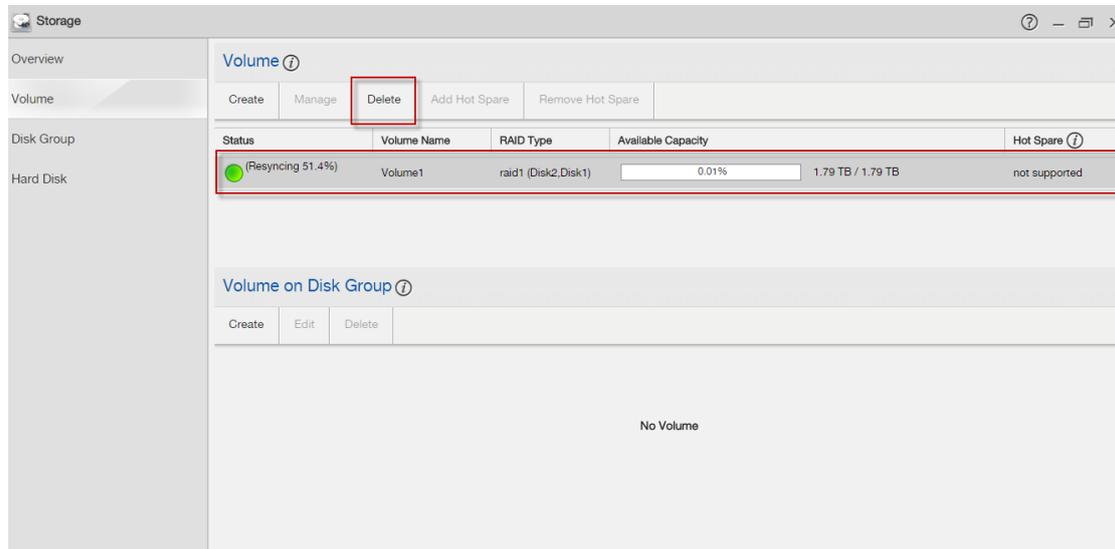


Volume status

### 3.3 Delete Volume

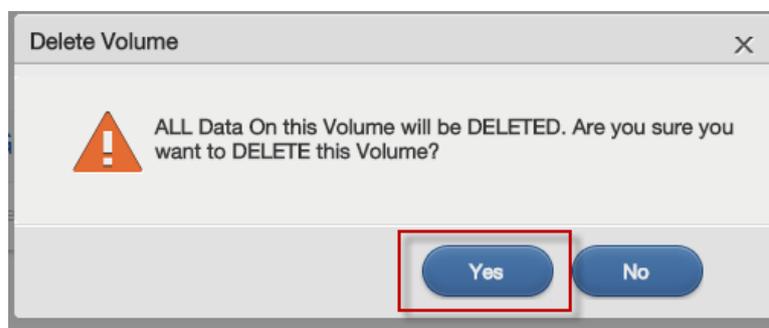
Select a volume and click **Delete** to remove it.

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



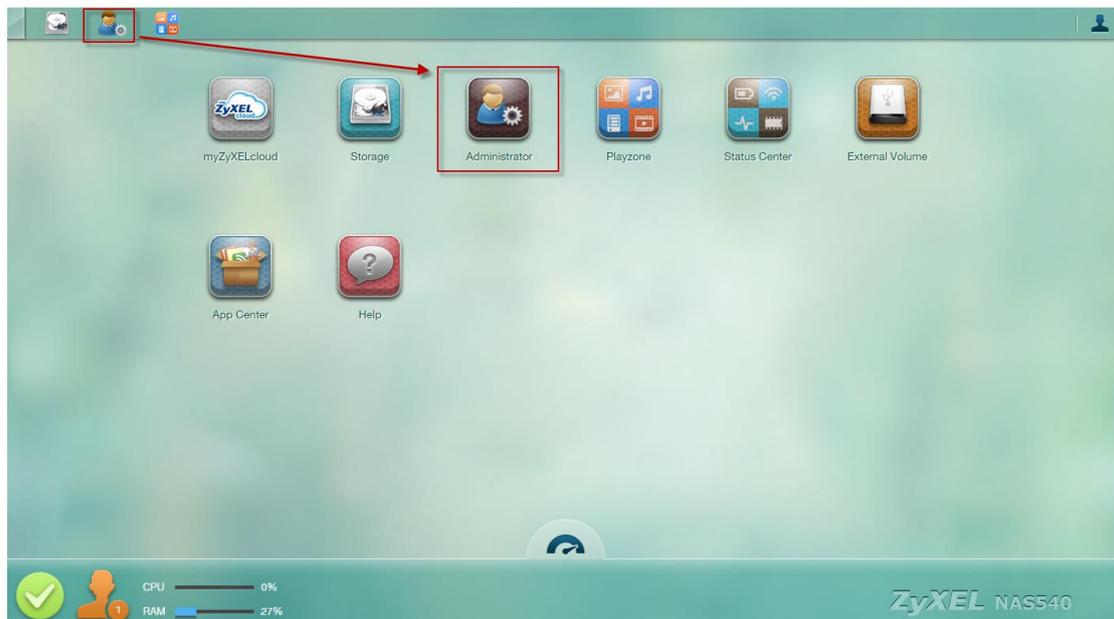
Click on **Delete**

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

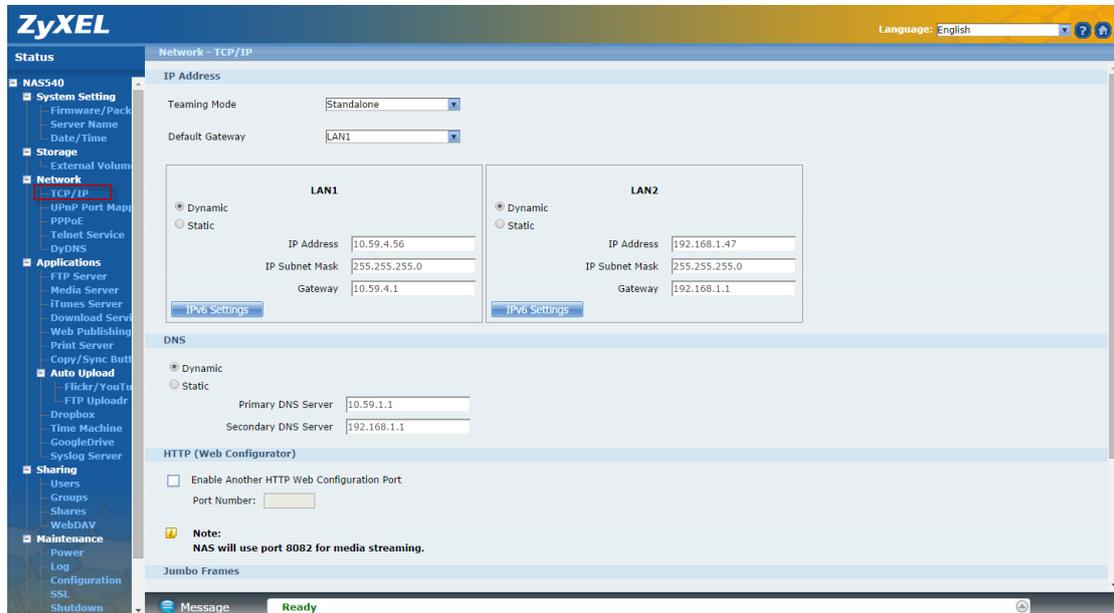
The **Status** screen is the first advanced administration screen that displays. The navigation panel on the left of the **Web Configurator** screen contains screen links. Click a link to display sub-links.

Type	Share Name	Username	Connected At	IP Address
Web		admin	2014-10-14 20:52:16	10.59.4.32
CIFS	photo	pc-guest	2014-10-14 20:17:52	10.59.4.32
CIFS	music	pc-guest	2014-10-14 20:17:52	10.59.4.32

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.

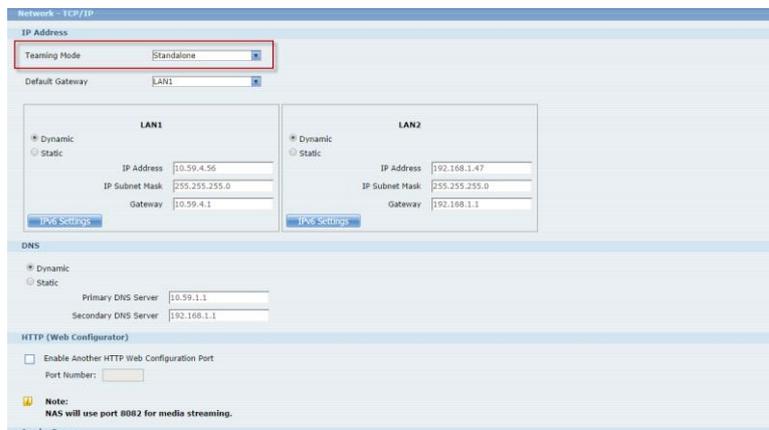


Network screen

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

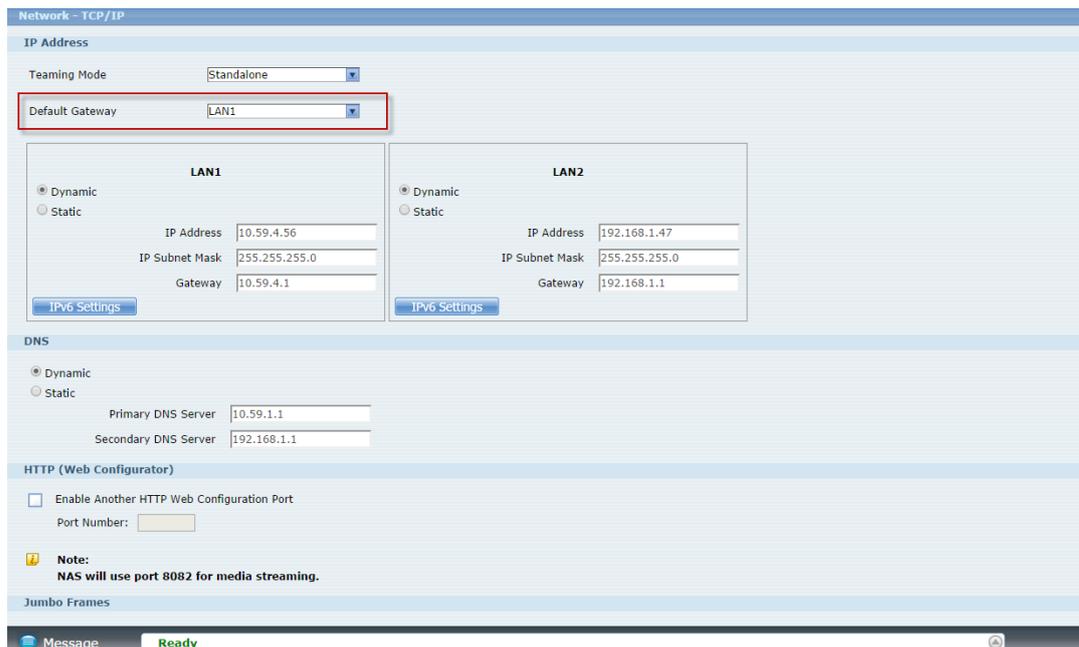
### Teaming Mode

- **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.



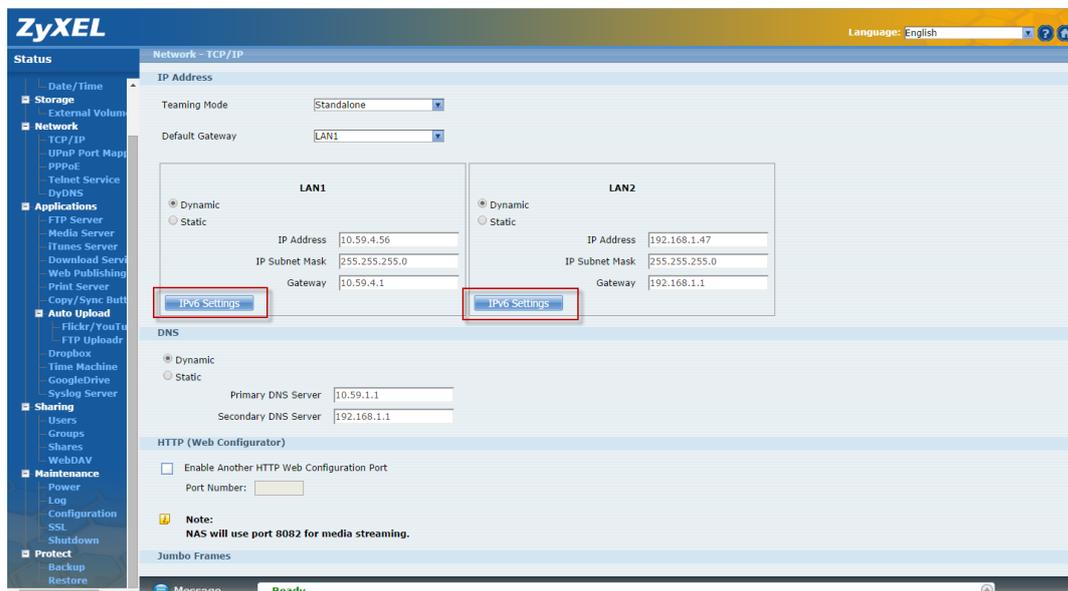
Select Teaming mode for NAS

Select the LAN interface to use as the default gateway.



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.

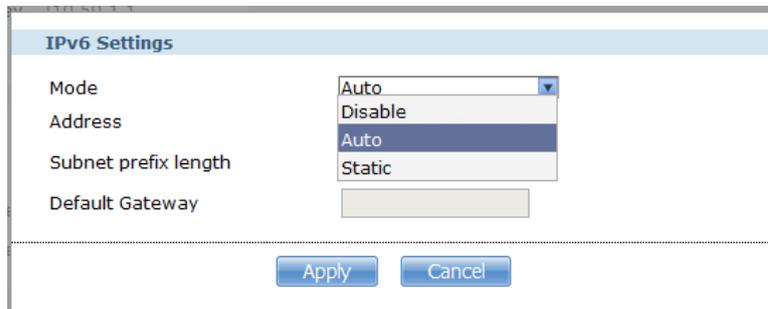


Click on IPv6 Settings

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.



The screenshot shows the 'IPv6 Settings' dialog box. The 'Mode' dropdown menu is open, showing three options: 'Auto', 'Disable', and 'Static'. The 'Address', 'Subnet prefix length', and 'Default Gateway' fields are currently empty. 'Apply' and 'Cancel' buttons are at the bottom.

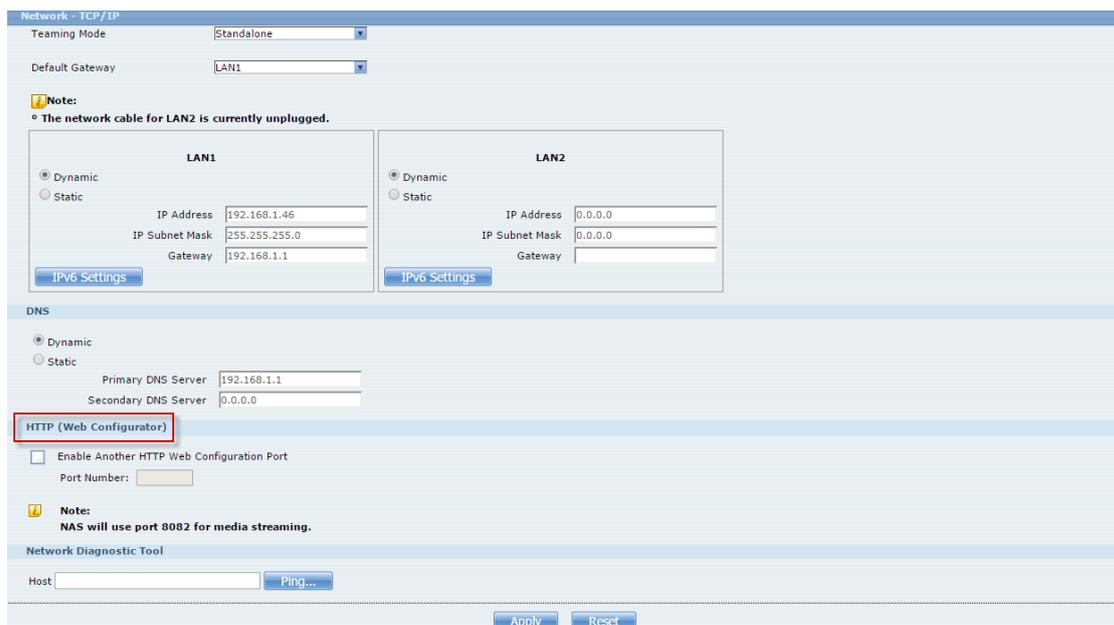
*select Disable / Auto / Static*



The screenshot shows the 'IPv6 Settings' dialog box with 'Mode' set to 'Auto'. The 'Address' field now contains the IPv6 address 'fe80::2a0:c5ff:feef:aacd', 'Subnet prefix length' is '64', and 'Default Gateway' is empty. 'Apply' and 'Cancel' buttons are at the bottom.

*Auto will get IPv6 IP address automatically*

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



The screenshot shows the 'Network - TCP/IP' configuration page. It includes sections for 'Teaming Mode' (Standalone), 'Default Gateway' (LAN1), and a note about LAN2 being unplugged. There are two panels for LAN1 and LAN2, each with 'Dynamic' and 'Static' radio buttons and fields for IP Address, Subnet Mask, and Gateway. Below these is the 'DNS' section with 'Dynamic' selected and fields for Primary and Secondary DNS Servers. The 'HTTP (Web Configurator)' section has a checkbox for 'Enable Another HTTP Web Configuration Port' and a 'Port Number' field. A note states 'NAS will use port 8082 for media streaming.' At the bottom is the 'Network Diagnostic Tool' with a 'Host' field and a 'Ping...' button. 'Apply' and 'Reset' buttons are at the very bottom.

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.

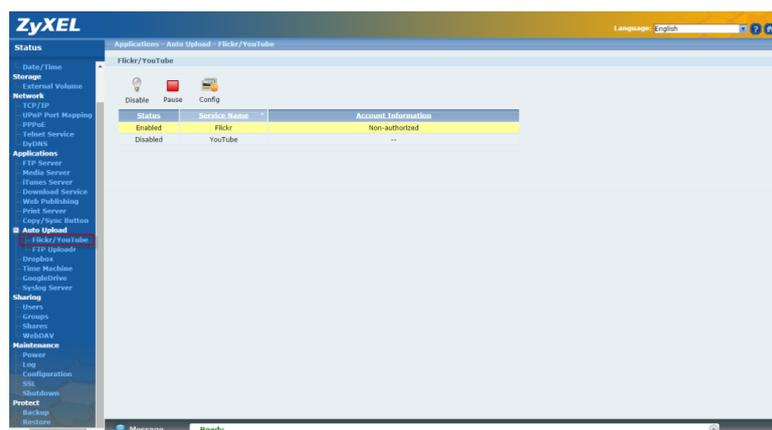
### Auto-upload Pictures to Flickr

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:

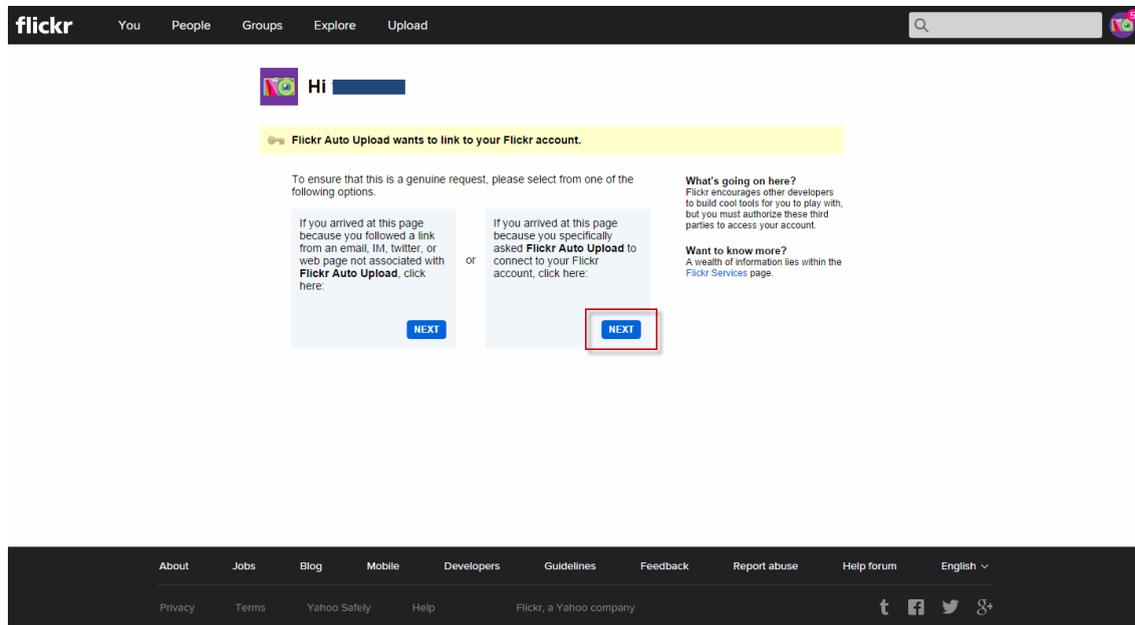
- Enable auto-upload in Flickr service.
- Configure the account Flickr account information.
- Link your NAS with your Flickr account.
- Specify the folders, which you want NAS to automatically, upload your pictures.
- Specify the grace period and other options in the auto-upload function.
- Move pictures 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 **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.



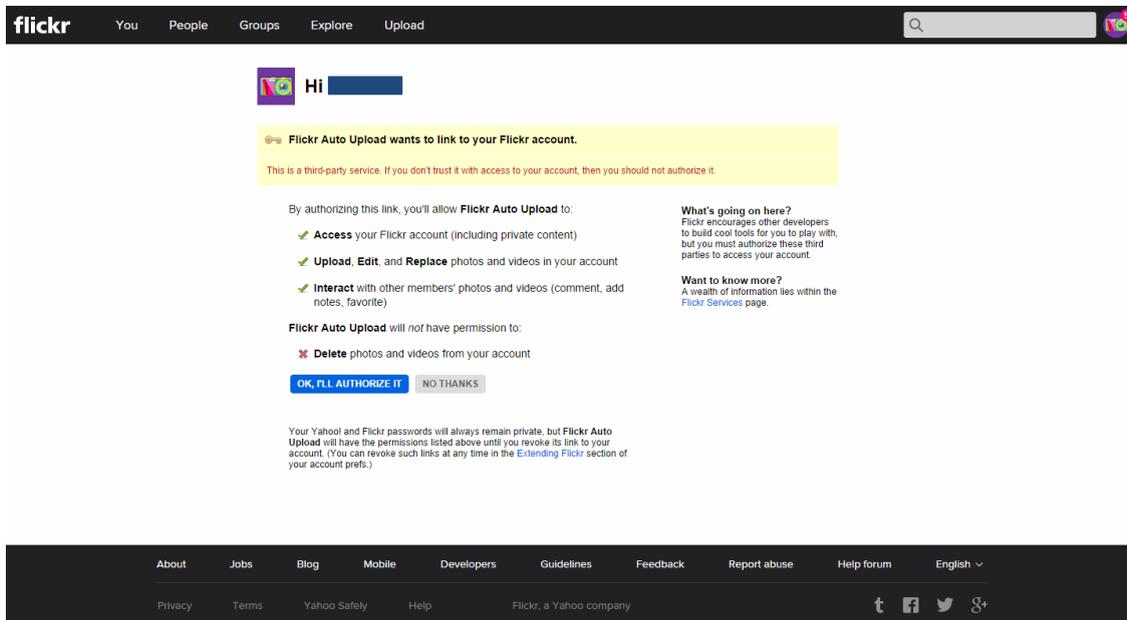
*Enable Flickr service.*

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.

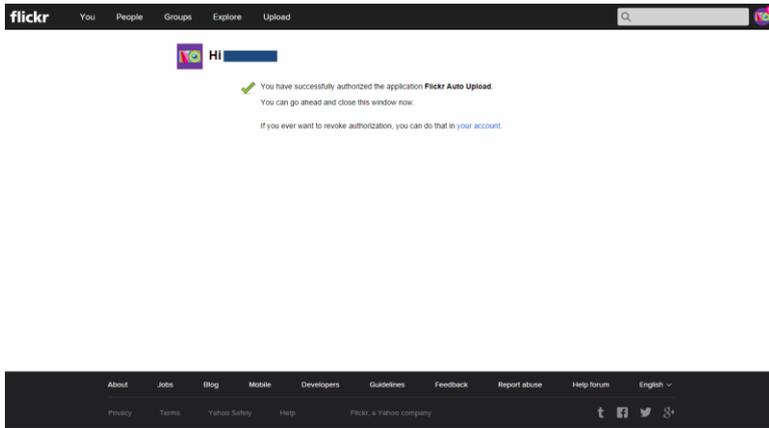


Authorization between your account and NAS

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

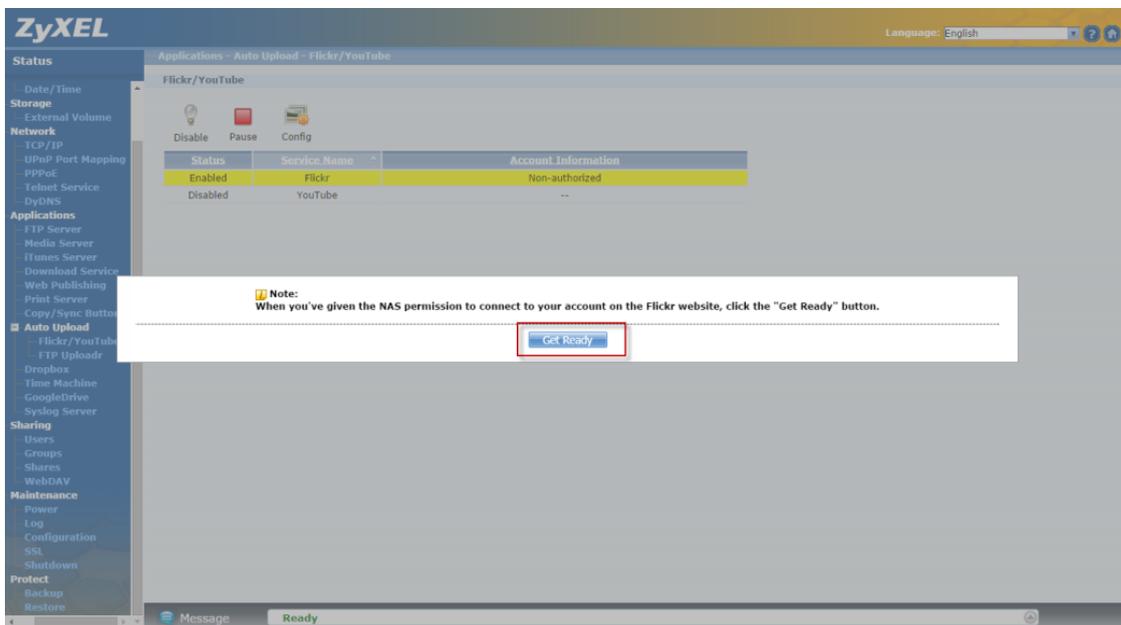


Authorization screen



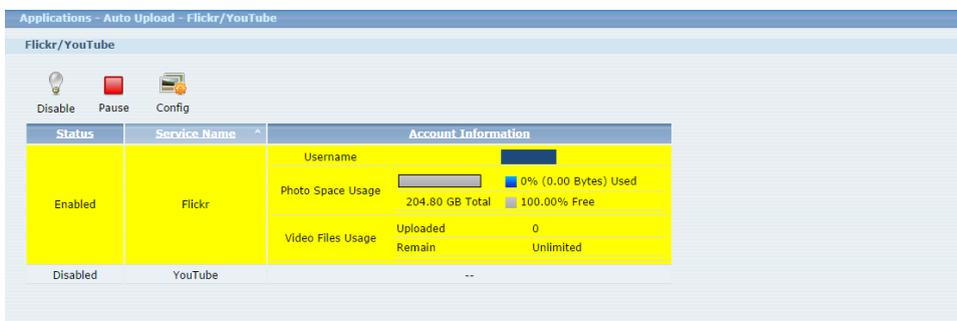
Successful authorization

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 **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.

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.

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: v221101

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

Video Files Usage: 0 Uploaded, Unlimited Remain

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: /

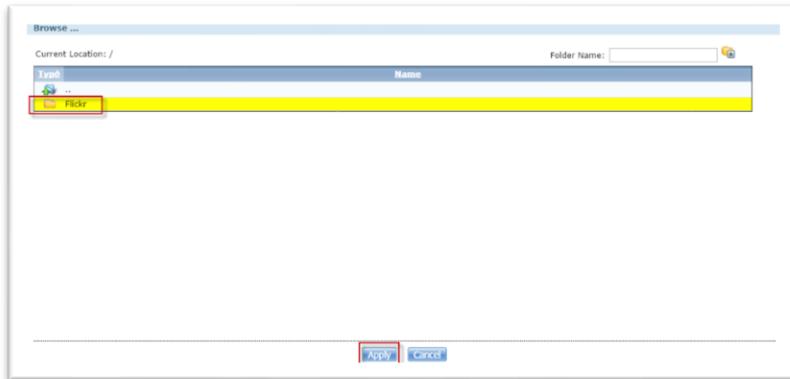
Folder Name: Flickr

Type	Name
..	..

Apply Cancel

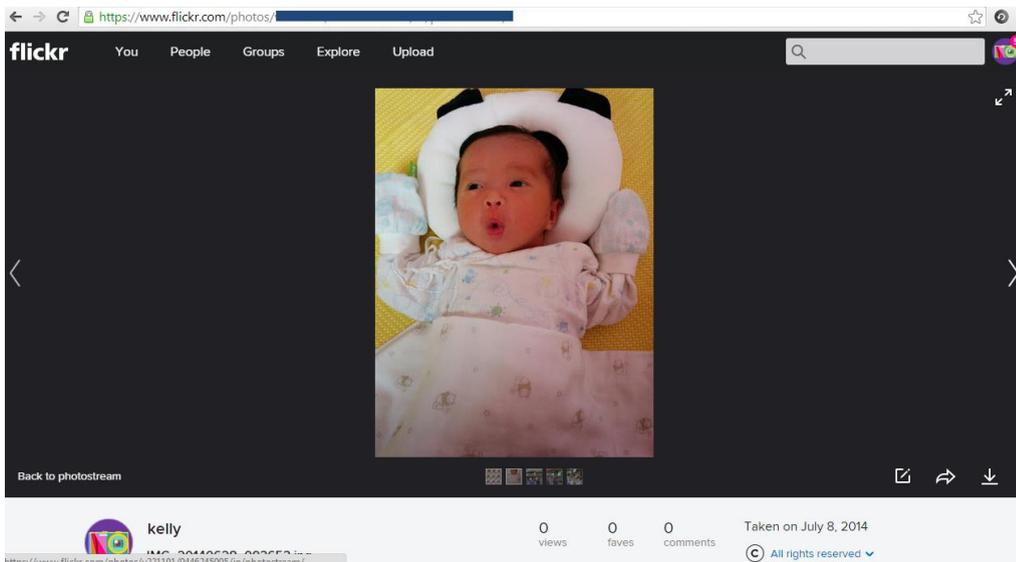
Or create folder in Browse page

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



*Click on "Apply" after specifying the folder*

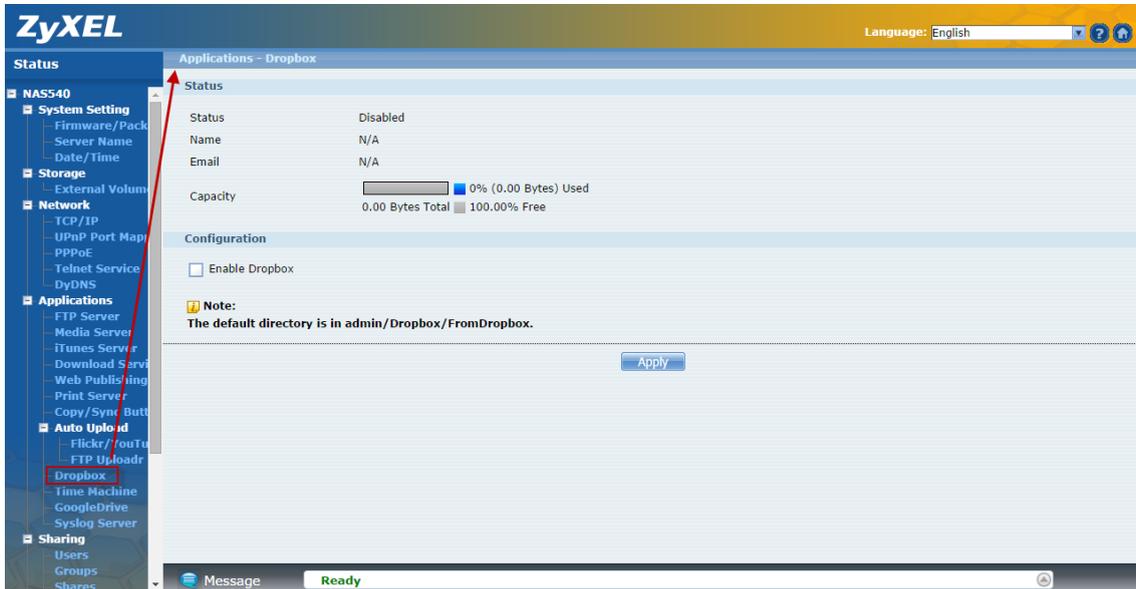
After 15 minutes, the NAS will upload the newly added photos to the Flickr website. In this example, we can see that one picture has been uploaded to the website.



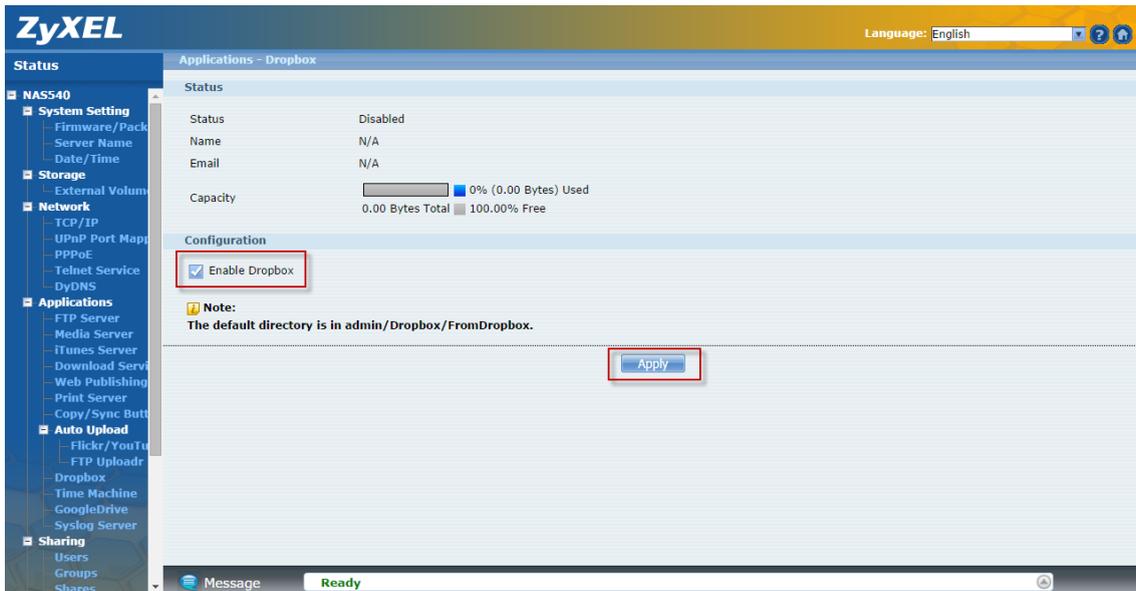
*Uploaded photo*

## 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.



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

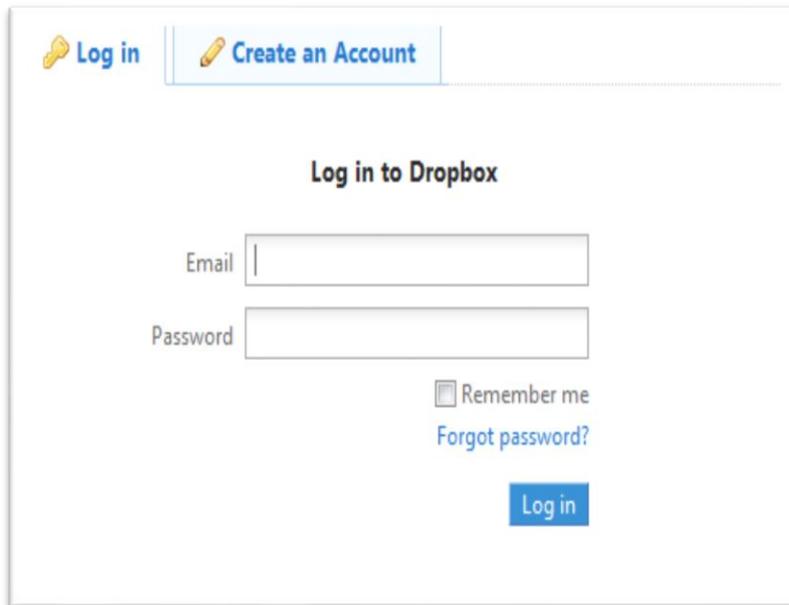


Dropbox screen

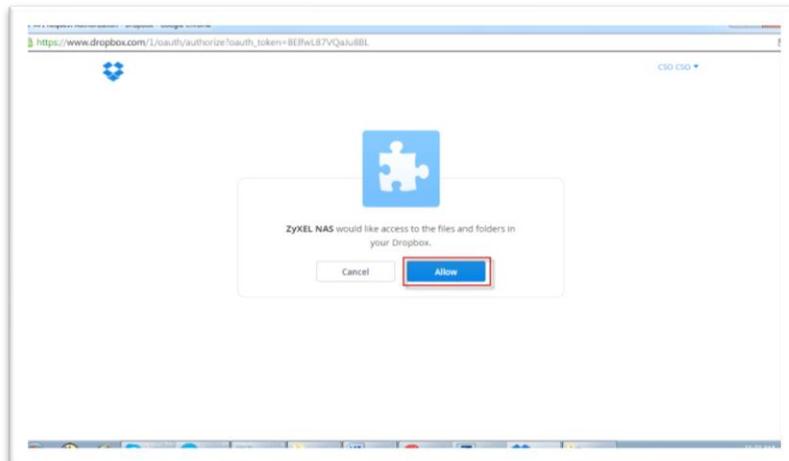
After you enable the Dropbox service, the browser is going to link to the Dropbox website. Meanwhile, please make sure that you have the Dropbox account information.

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

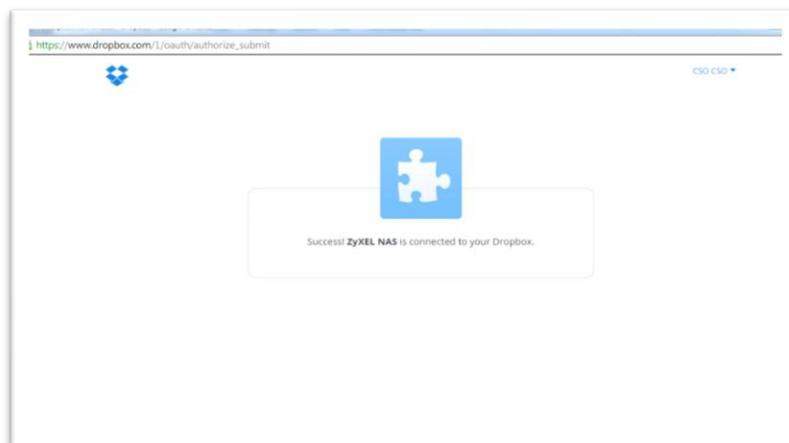
In the following popup browser, you need to authorize the connection between your account and your NAS.

The image shows the Dropbox login interface. At the top, there are two tabs: "Log in" (selected) and "Create an Account". Below the tabs, the heading "Log in to Dropbox" is centered. There are two input fields: "Email" and "Password". Below 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.*

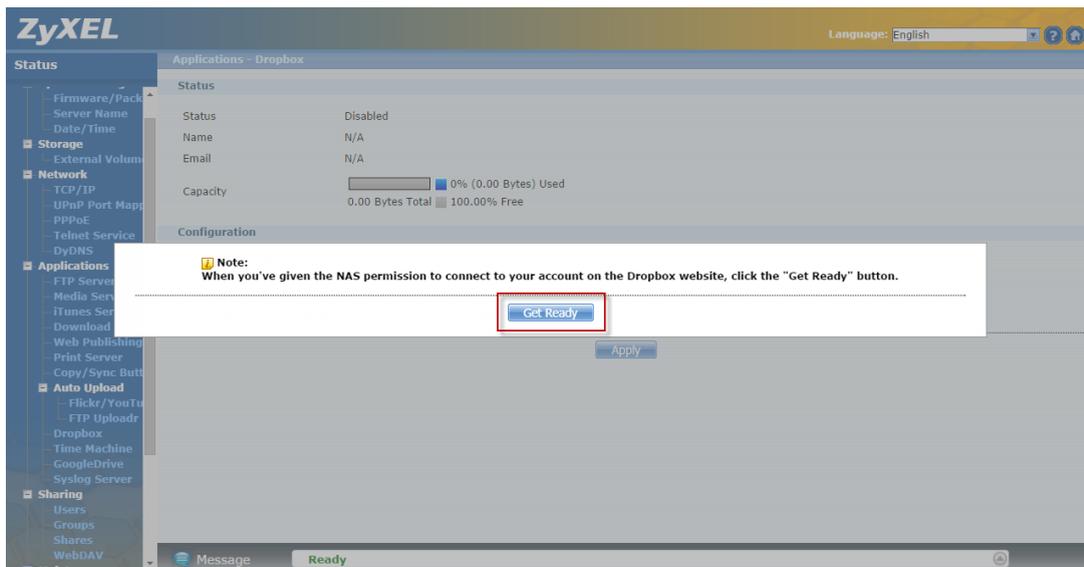


*Authorization between your account and NAS.*



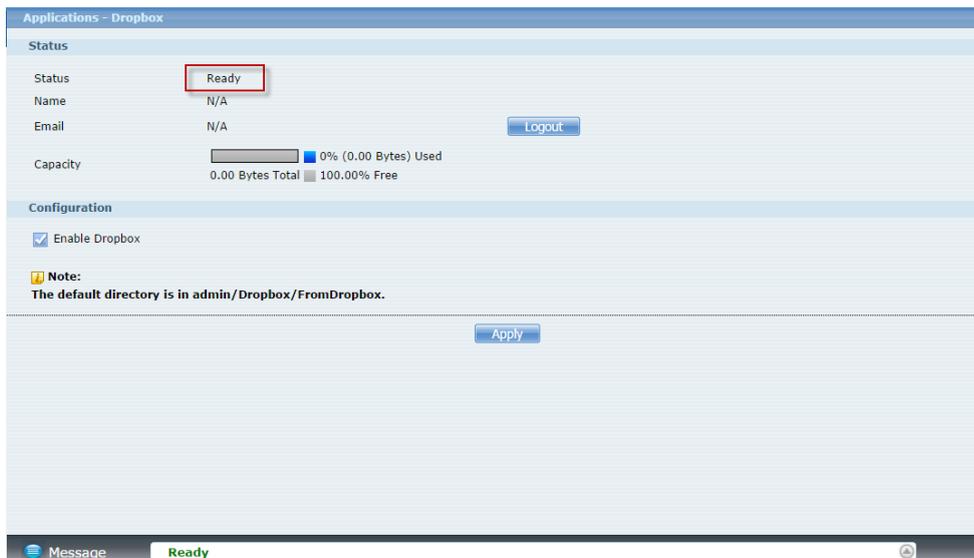
*Success! ZyXEL NAS is connected to your Dropbox.*

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



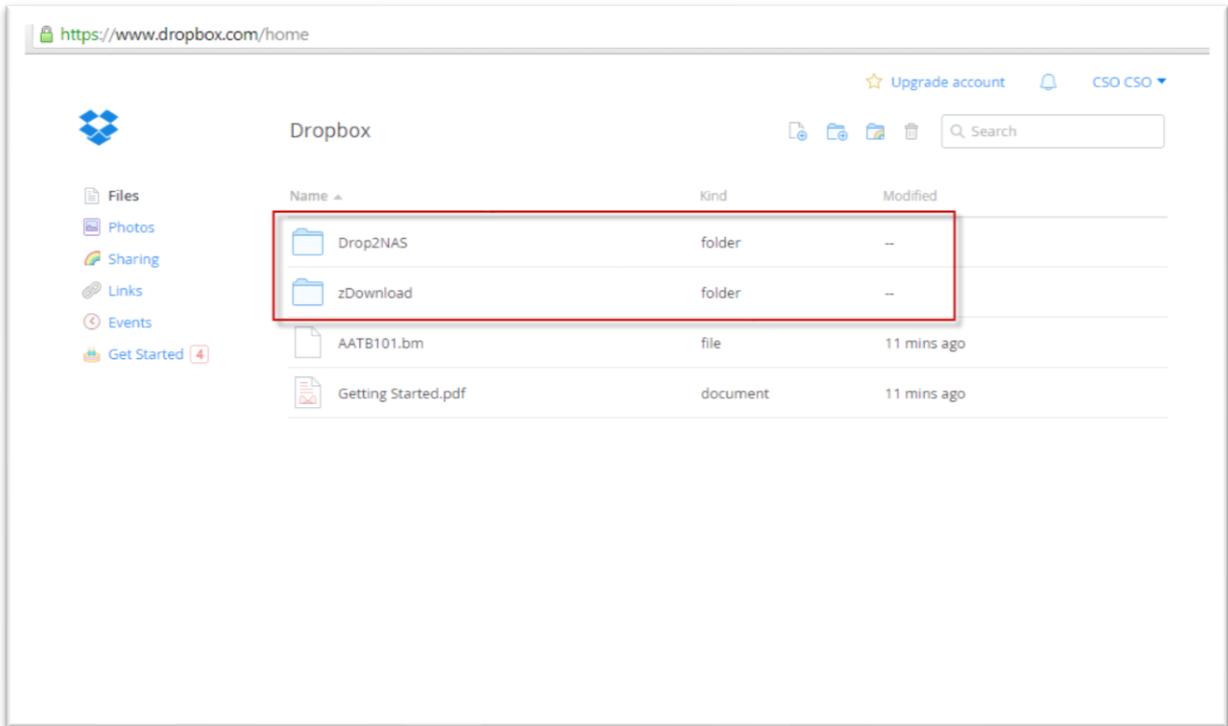
Click on Get Ready.

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.



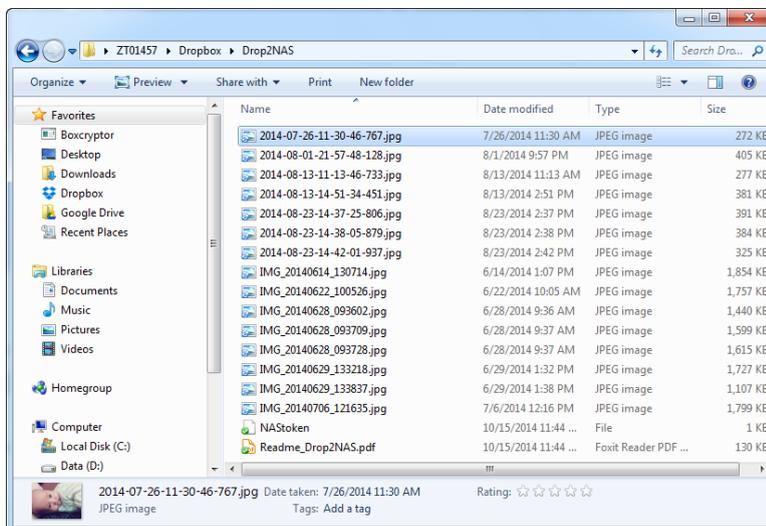
Monitor the service status

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

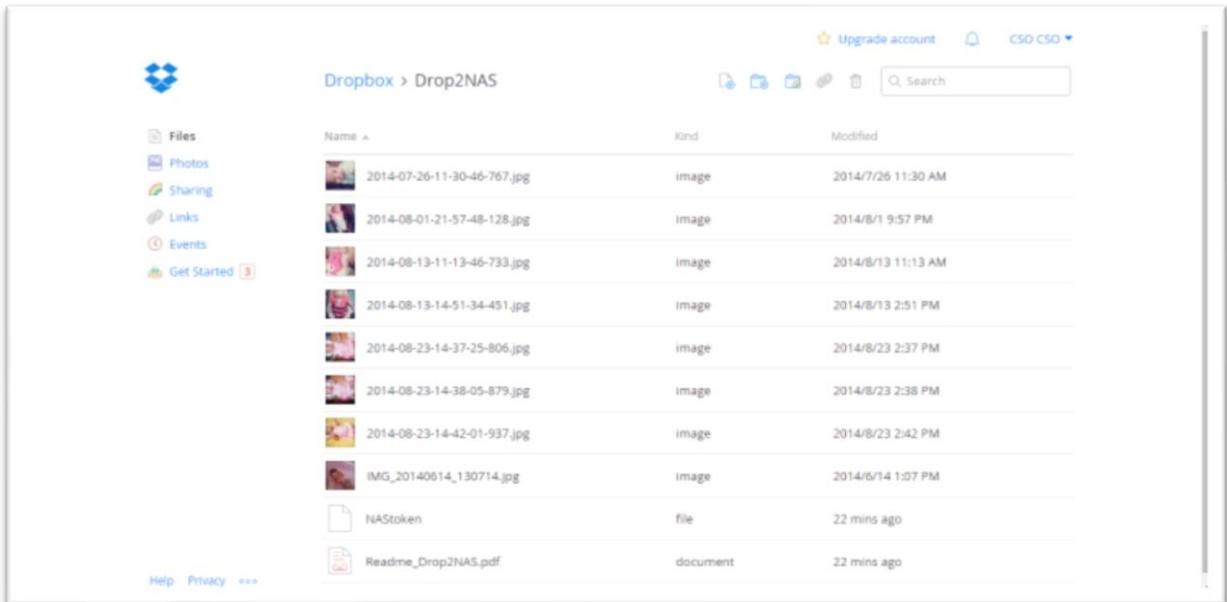


The NAS connects to Dropbox and copies files in the Drop2NAS folder to the NAS's admin\Dropbox\FromDropbox folder, and then empties the Drop2NAS folder. The NAS initiates connections to the Dropbox server so you do not need to configure rules on a firewall in front of the NAS to allow access to the NAS.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

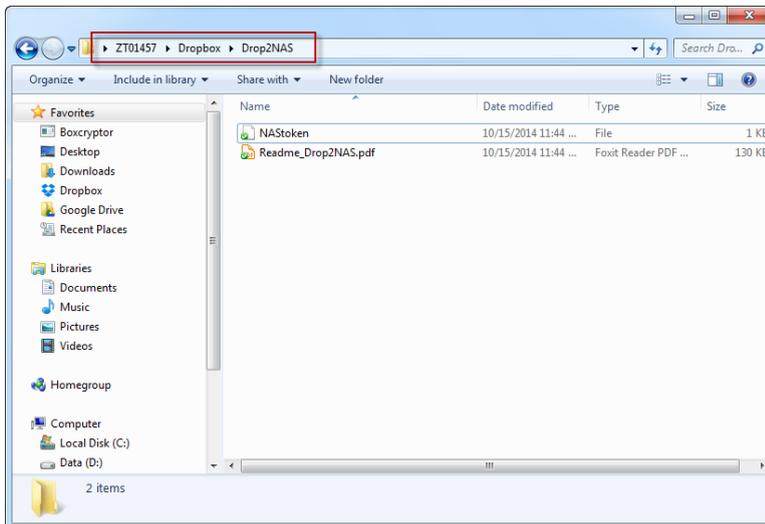
**Note: Do not delete the NAS token file, as it is needed for your NAS to work with the Dropbox account.**



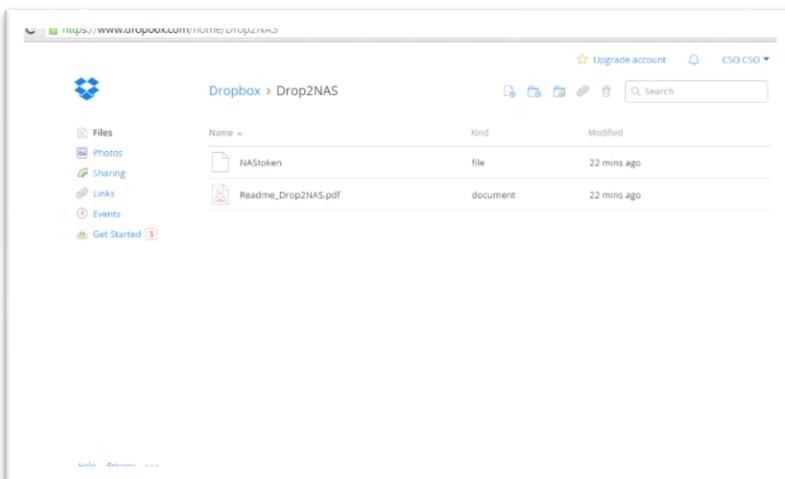
*Upload files to folder*



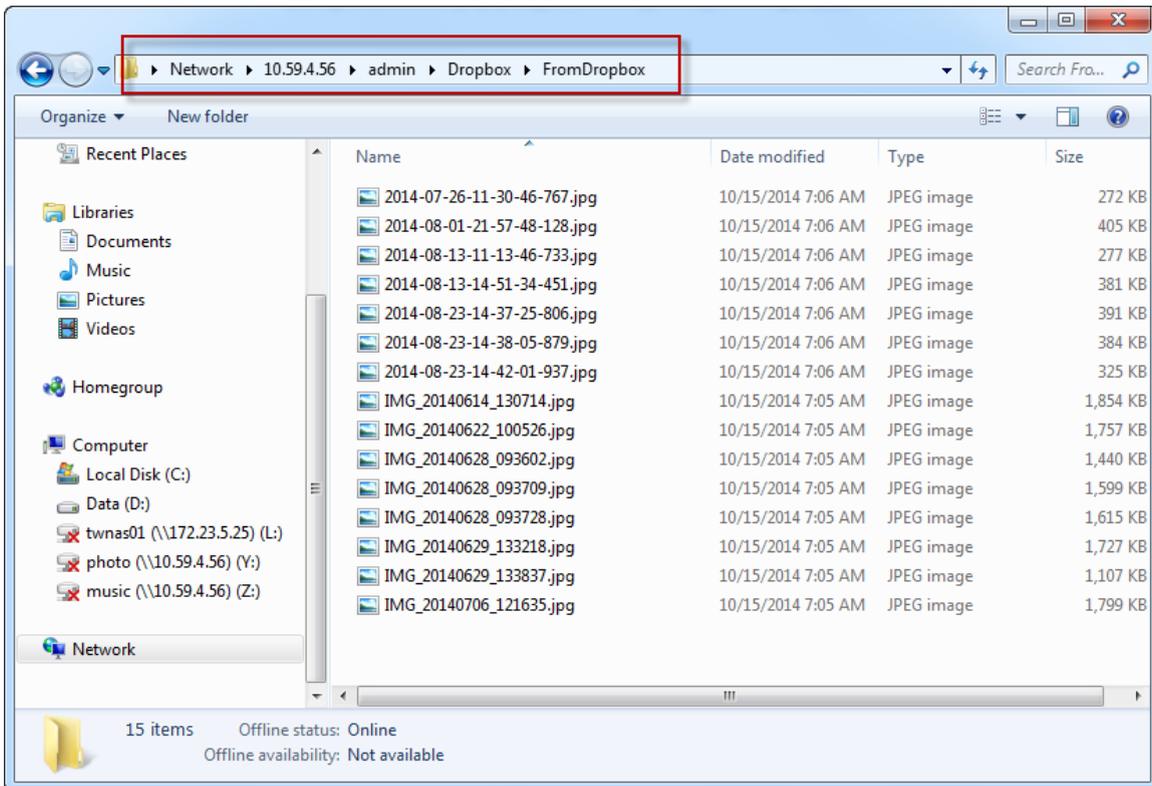
Check files from website



NAS auto move files from Dropbox server



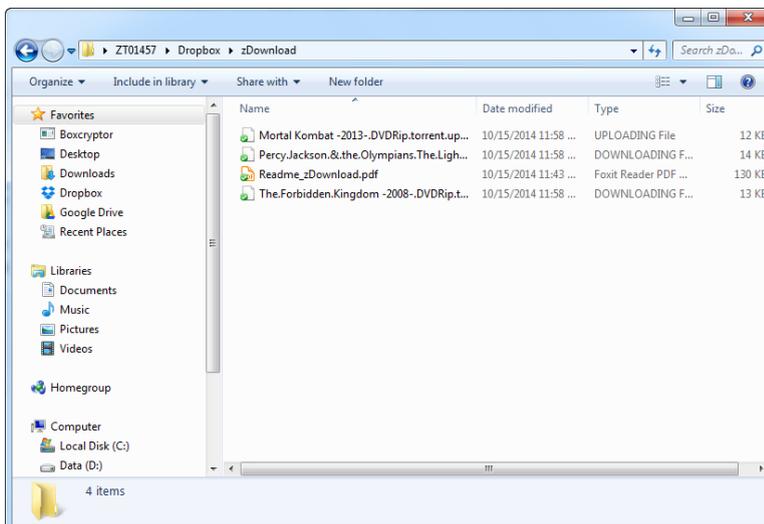
Dropbox status



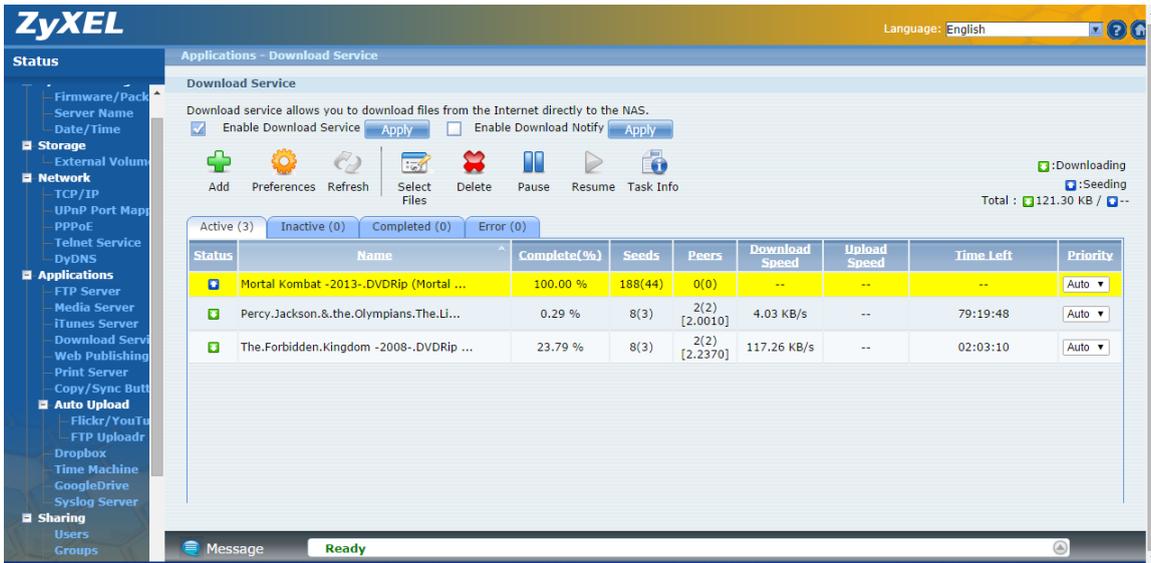
Check files on NAS

## 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.



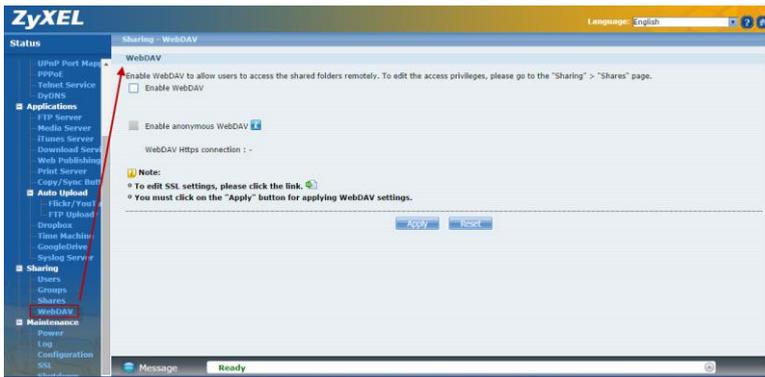
Upload torrent files to zDownload folder.



NAS get files and download automatically

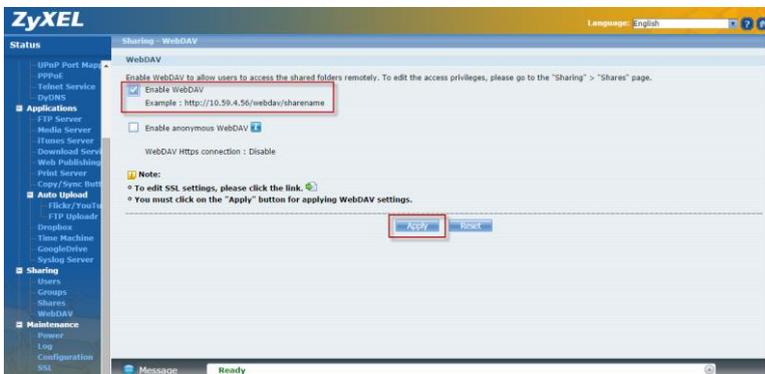
## 4.5 WebDAV

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



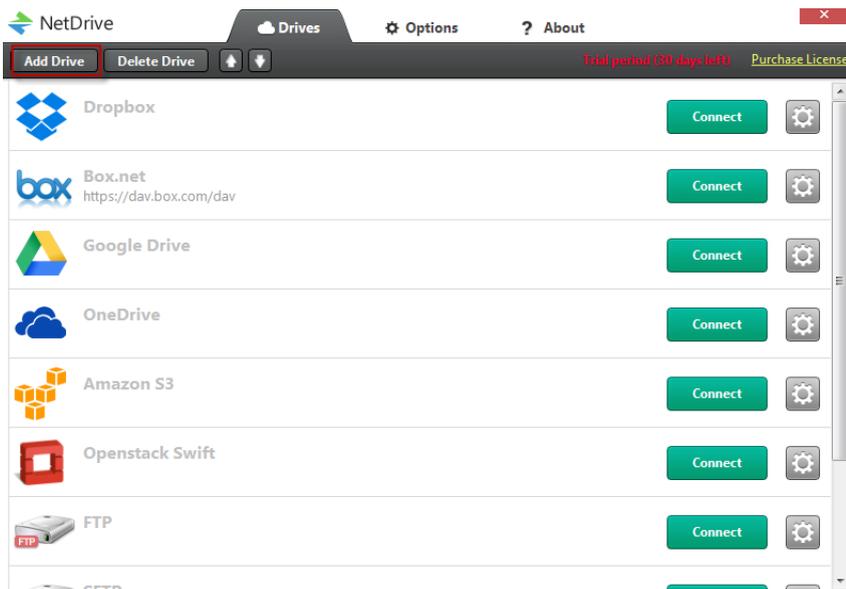
Remote servers.

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

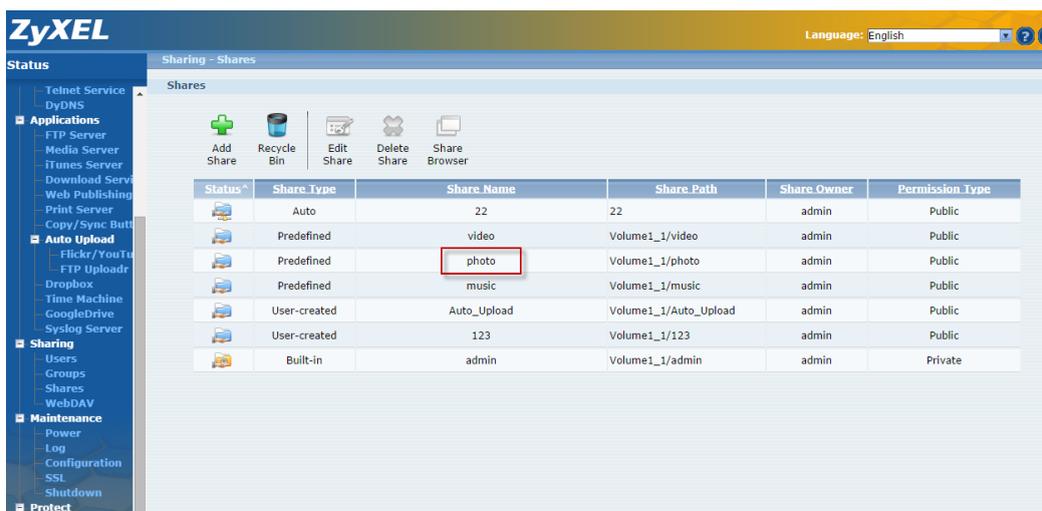
Download and install NetDrive. Click on **Add Drive** and use the URL for WebDAV connections to the NAS to add a drive entry for accessing the NAS.



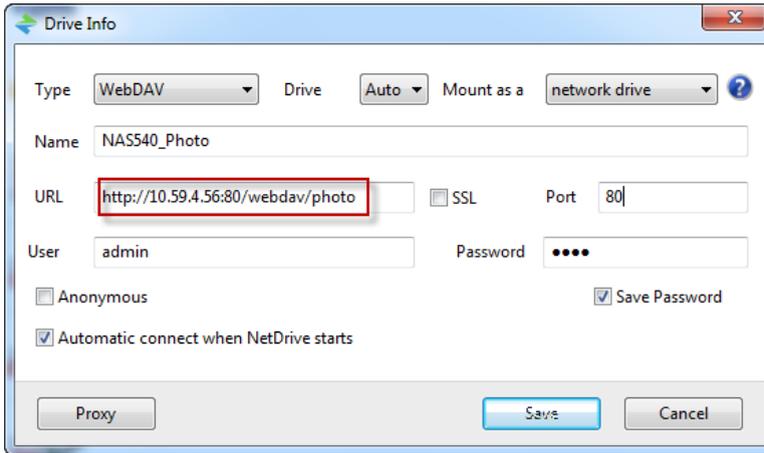
Add Drive

### Add Drive:

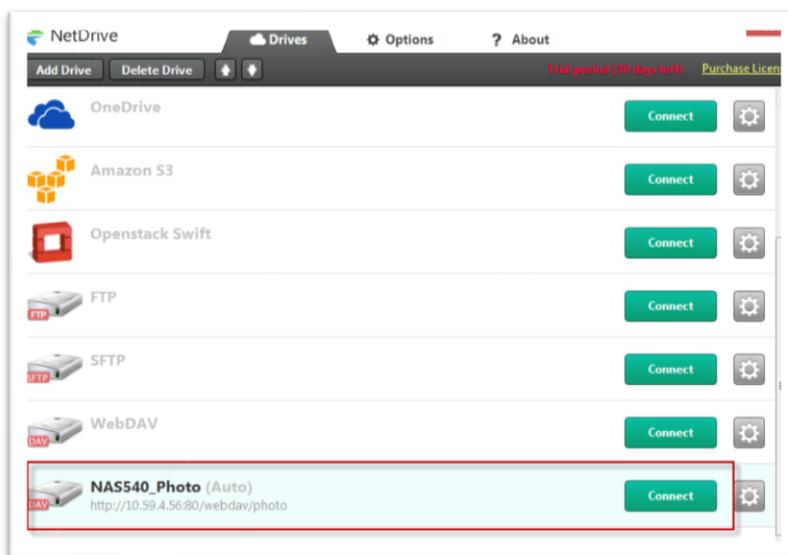
- Type: Select **WebDAV** from the drop-down menu
- Name: Connection name
- URL: Enter the NAS IP address or domain name and WebDAV folder name.  
The shared folder of WebDAV server default path is "http://IP\_Address/webdav/" + Share\_Name
- Port: Default NAS WebDAV server port: 80
- Drive: Select a 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.

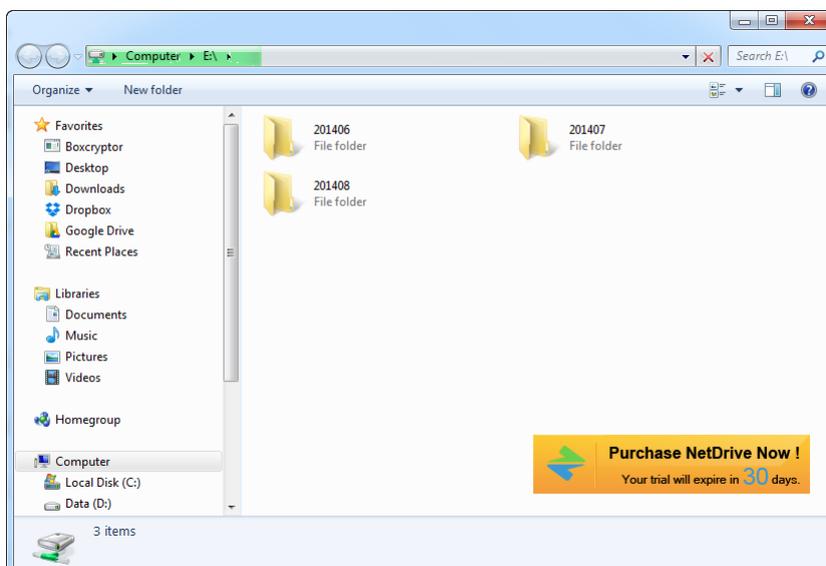


Setting Drive info



Connect to NAS

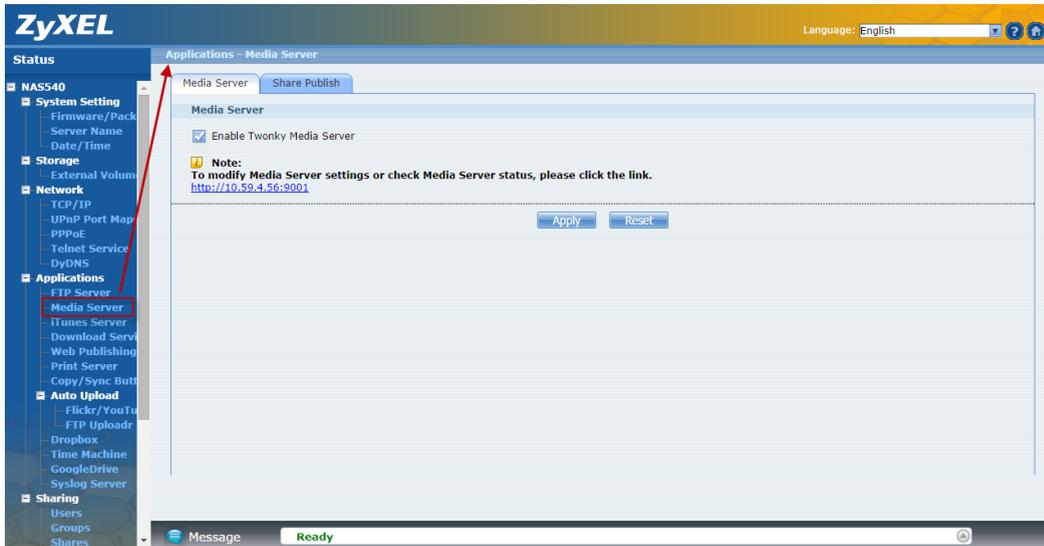
You can access this drive in the future under the Computer listing in Windows Explorer.



Check Windows Explorer

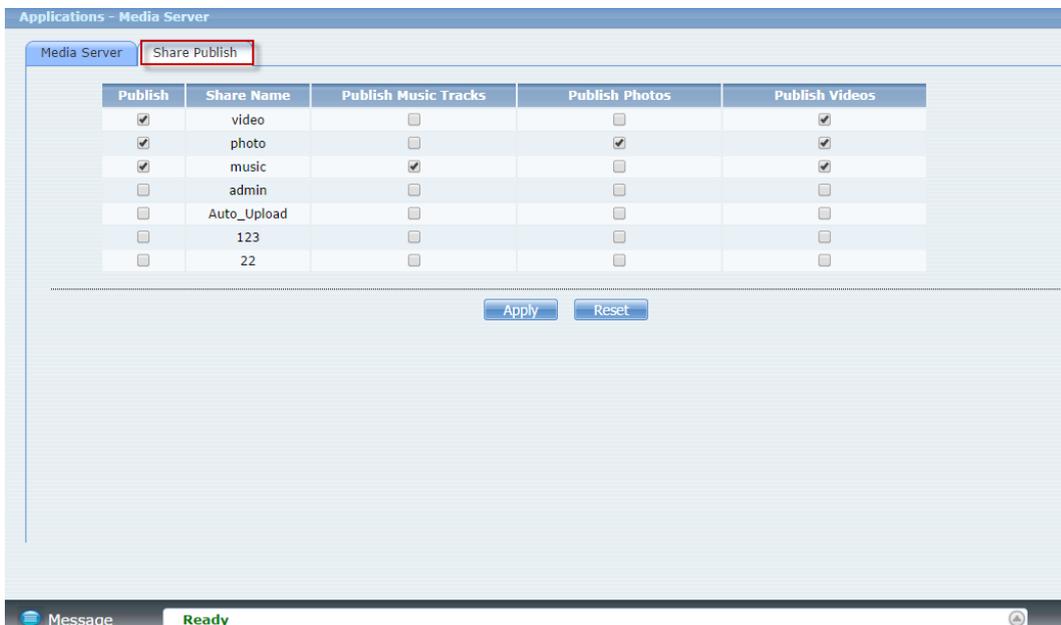
## 4.6 Media Server

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



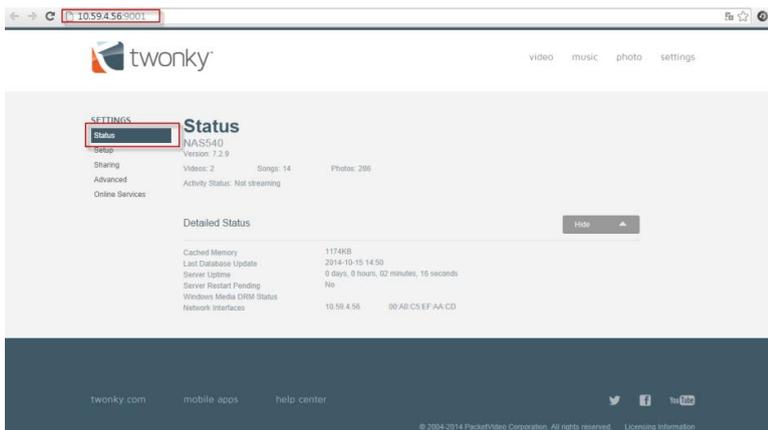
*Applications->Media Server*

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



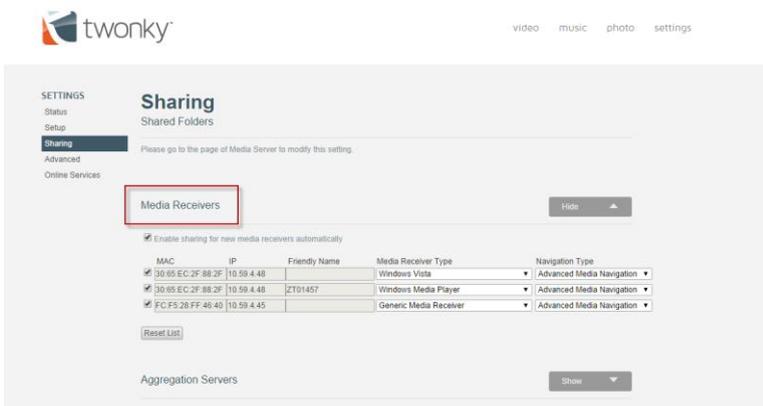
*Select share to publish*

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



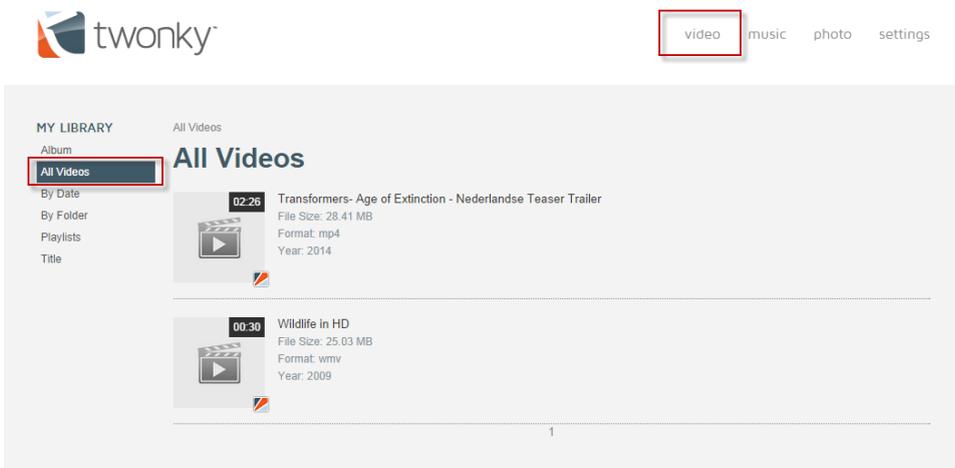
*Twonky screen*

Twonky auto detects media clients.



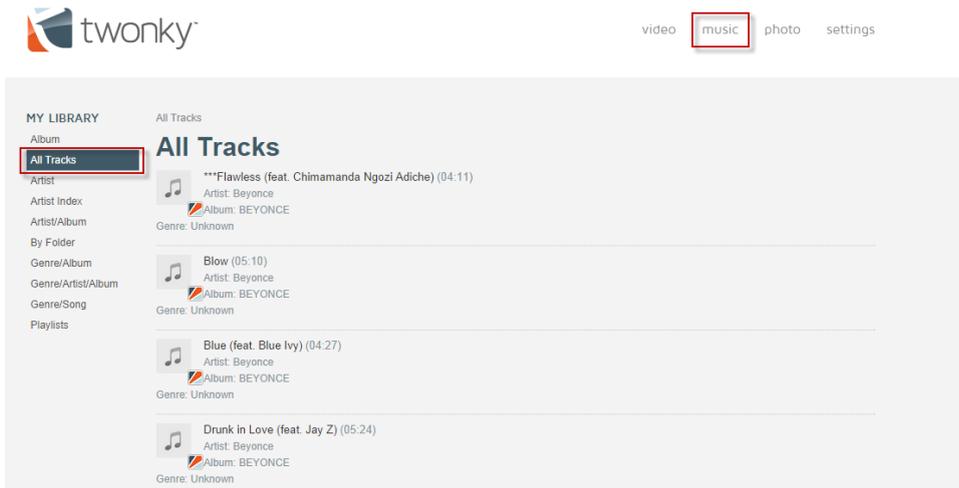
*Media Receivers info*

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



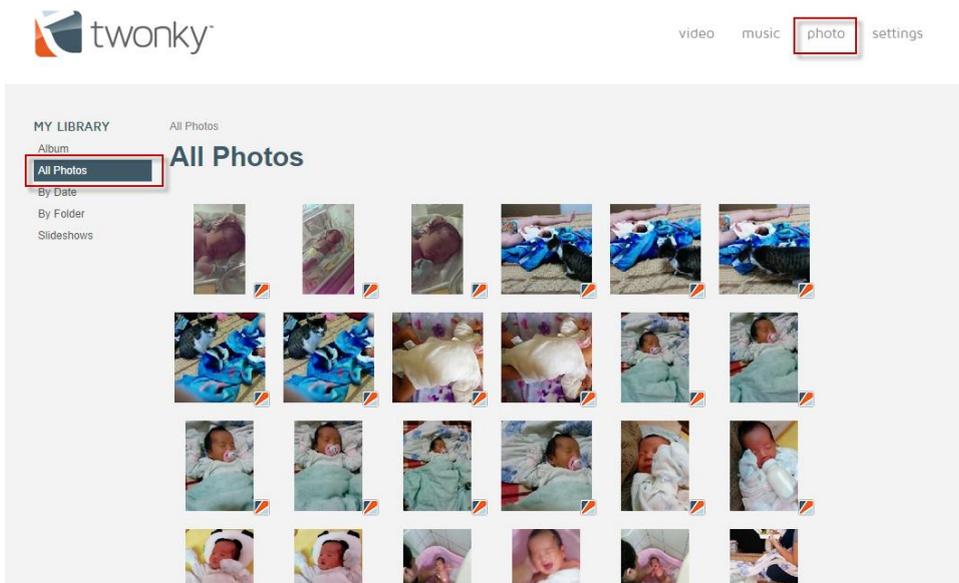
*Publish video files*

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



*Publish music files*

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



*Publish photo files*

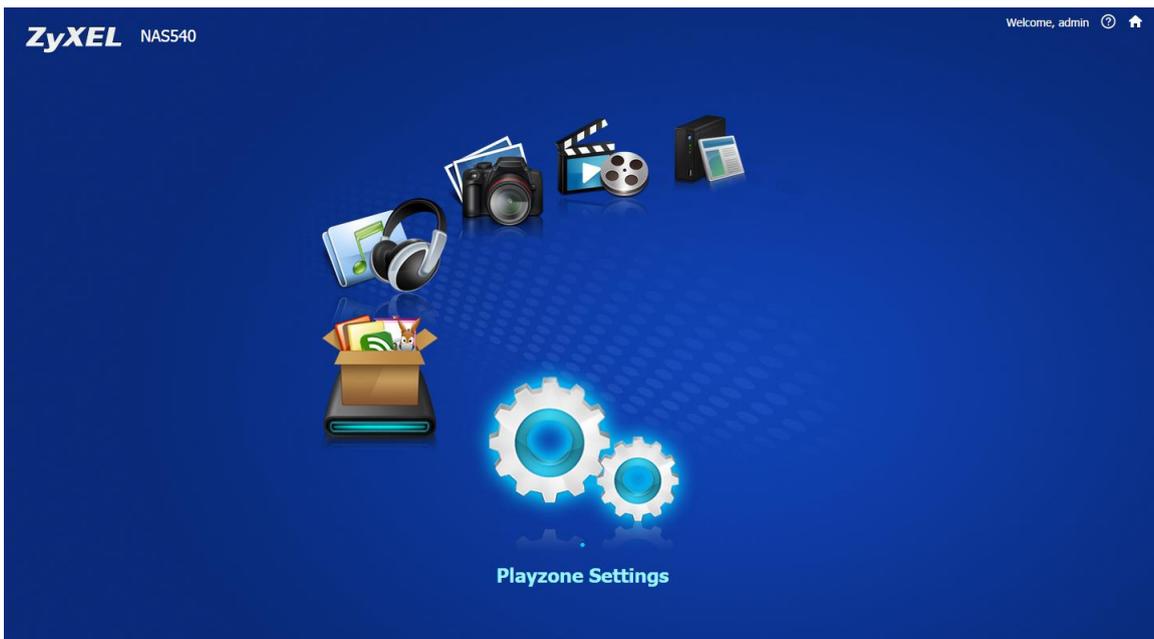
## 5. PlayZone

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.*

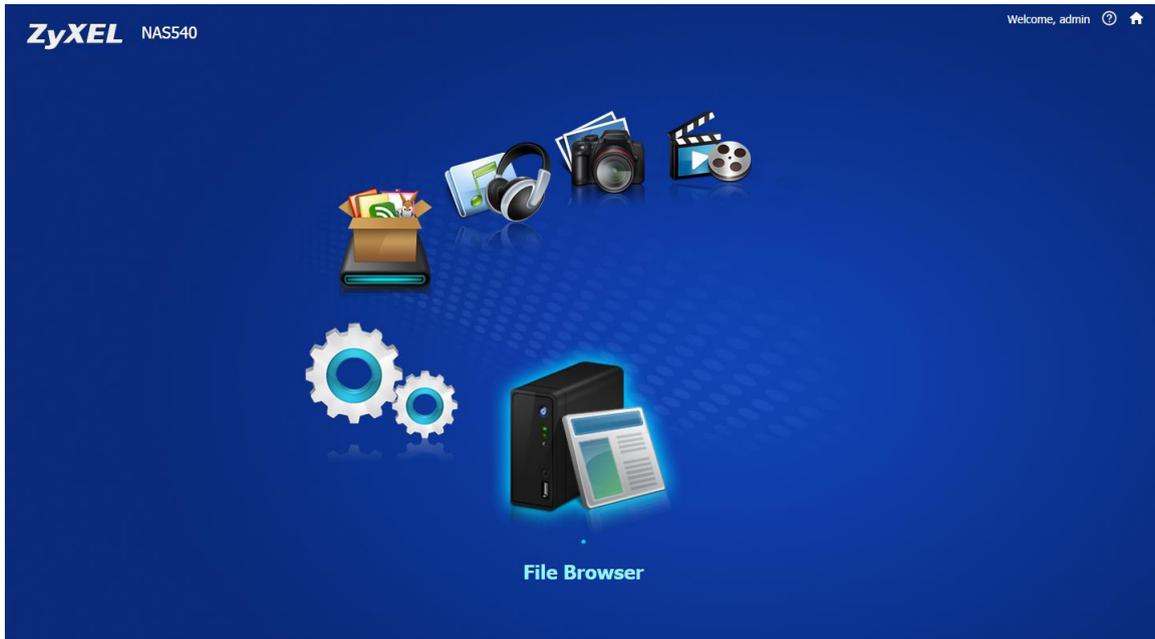
The Playzone **Home** screen displays icons for the various features you can access.



*Playzone screen*

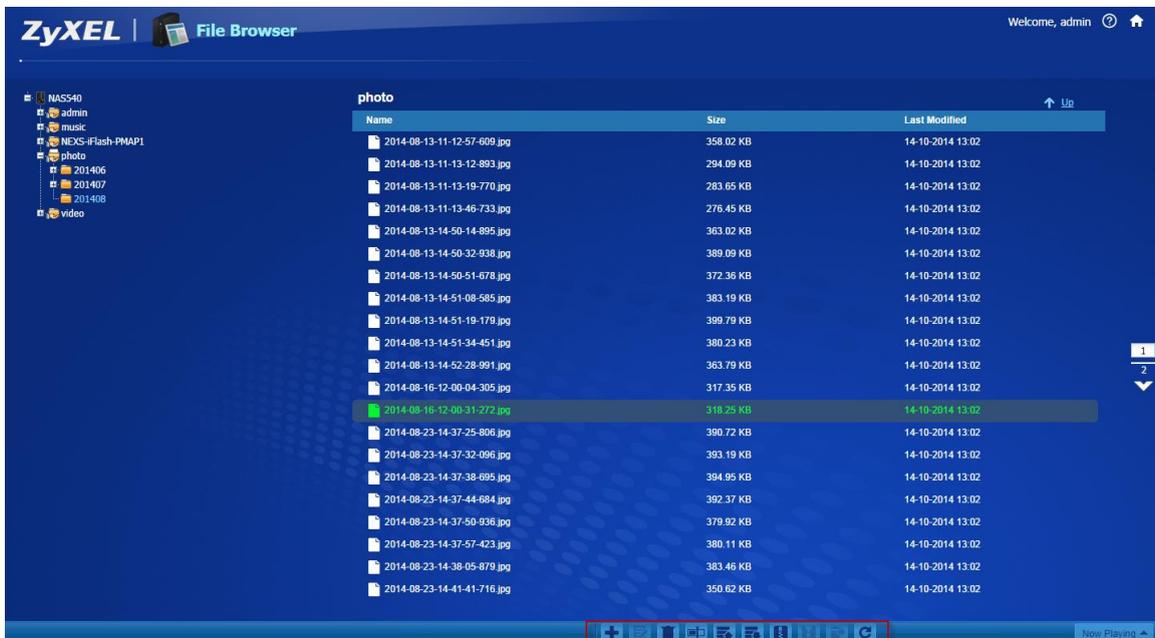
## 5.1 File Browser

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).



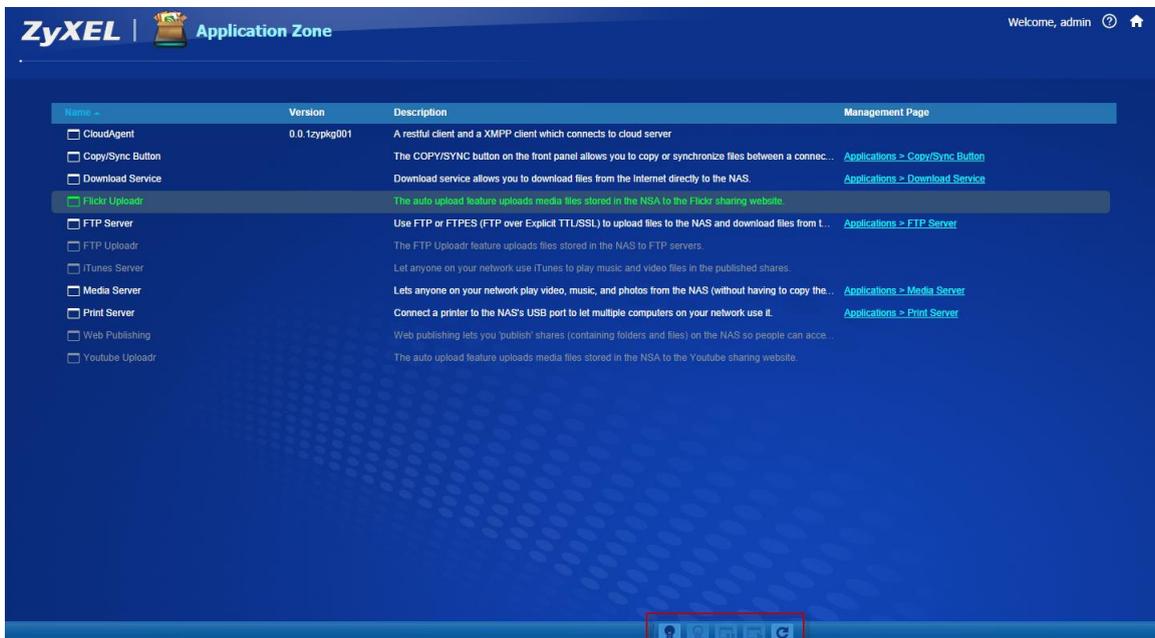
*Files in file browser*

## 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

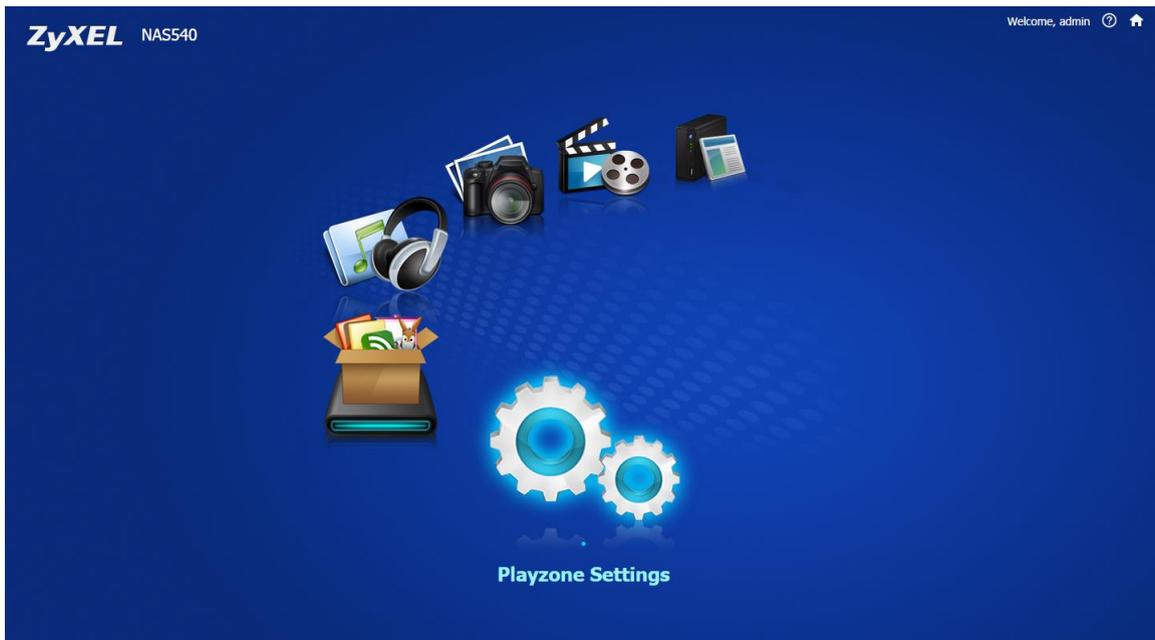


Name	Version	Description	Management Page
<input type="checkbox"/> CloudAgent	0.0.1zypkg001	A restful client and a XMPP client which connects to cloud server	
<input type="checkbox"/> Copy/Sync Button		The COPY/SYNC button on the front panel allows you to copy or synchronize files between a connect...	<a href="#">Applications &gt; Copy/Sync Button</a>
<input type="checkbox"/> Download Service		Download service allows you to download files from the Internet directly to the NAS.	<a href="#">Applications &gt; Download Service</a>
<input checked="" type="checkbox"/> Flickr Uploadr		The auto upload feature uploads media files stored in the NSA to the Flickr sharing website.	
<input type="checkbox"/> FTP Server		Use FTP or FTPES (FTP over Explicit TLS/SSL) to upload files to the NAS and download files from L...	<a href="#">Applications &gt; FTP Server</a>
<input type="checkbox"/> FTP Uploadr		The FTP Uploadr feature uploads files stored in the NAS to FTP servers.	
<input type="checkbox"/> iTunes Server		Let anyone on your network use iTunes to play music and video files in the published shares.	
<input type="checkbox"/> Media Server		Lets anyone on your network play video, music, and photos from the NAS (without having to copy the...	<a href="#">Applications &gt; Media Server</a>
<input type="checkbox"/> Print Server		Connect a printer to the NAS's USB port to let multiple computers on your network use it.	<a href="#">Applications &gt; Print Server</a>
<input type="checkbox"/> Web Publishing		Web publishing lets you 'publish' shares (containing folders and files) on the NAS so people can acce...	
<input type="checkbox"/> Youtube Uploadr		The auto upload feature uploads media files stored in the NSA to the Youtube sharing website.	

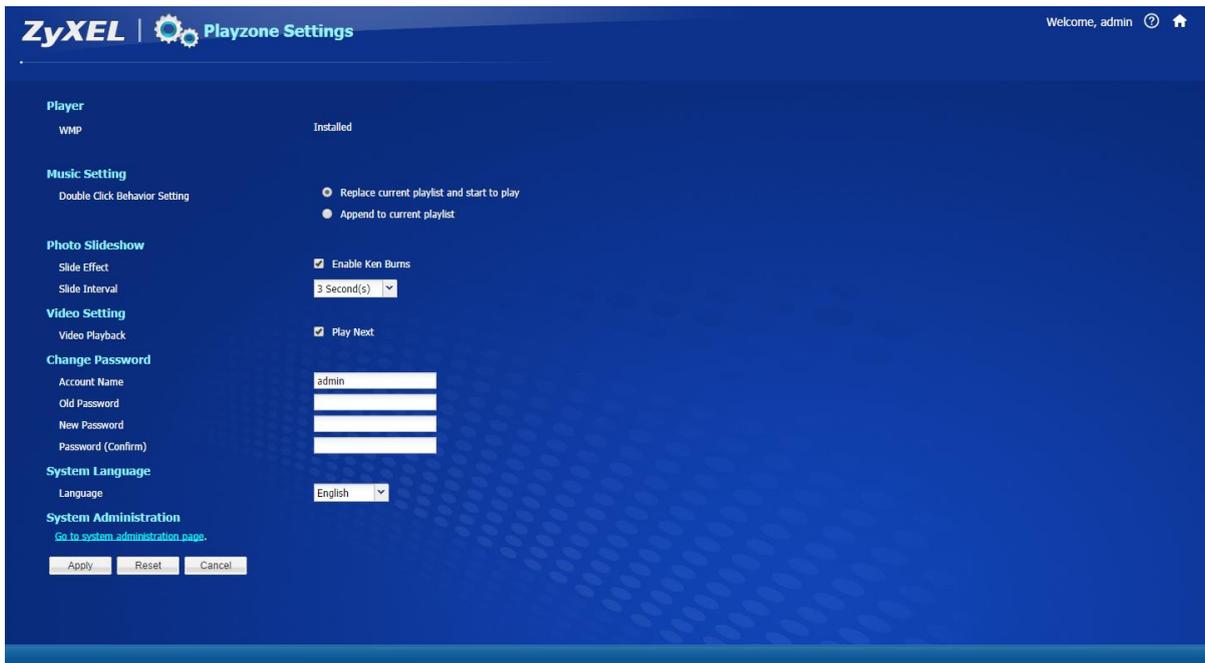
Application information

## 5.3 Playzone Settings

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



*Playzone settings*



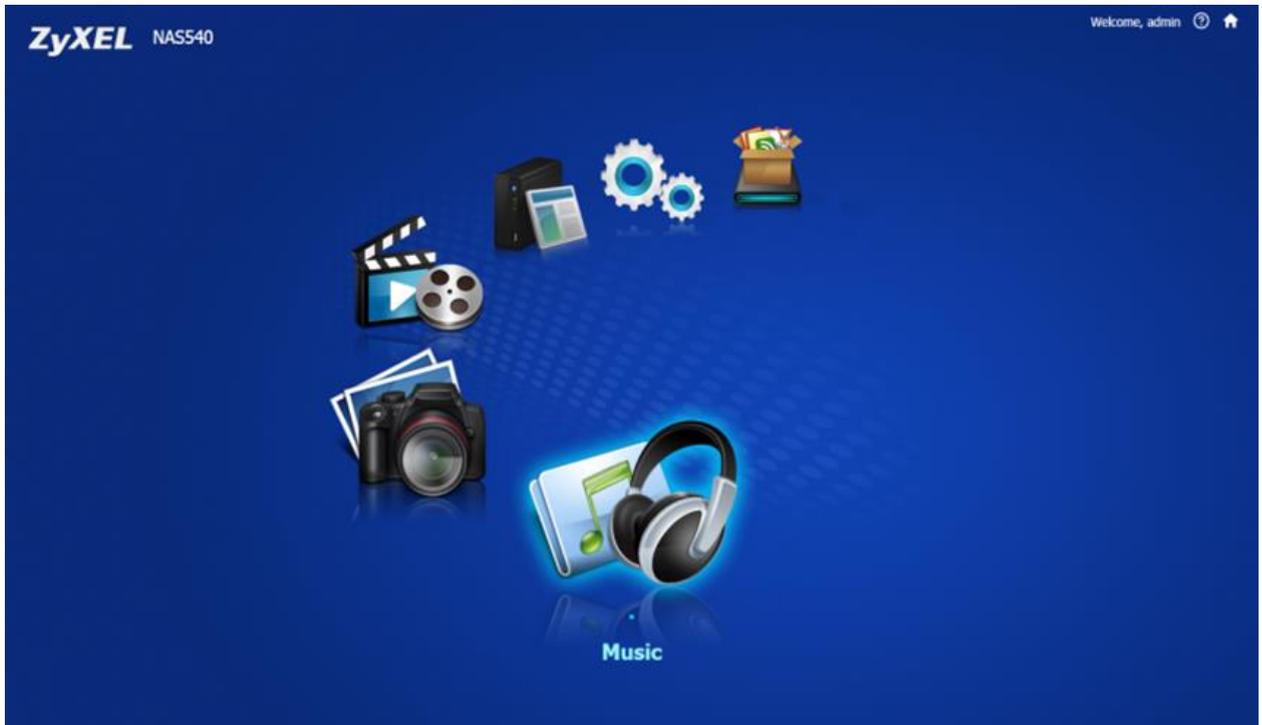
*Playzone setting screen*

## 5.4 Music

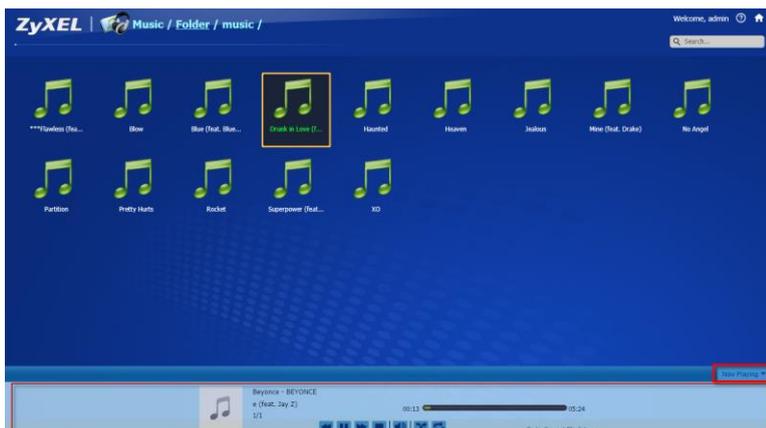
Use the Playzone media server screens to view and play media files in the shares that publish them.

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.

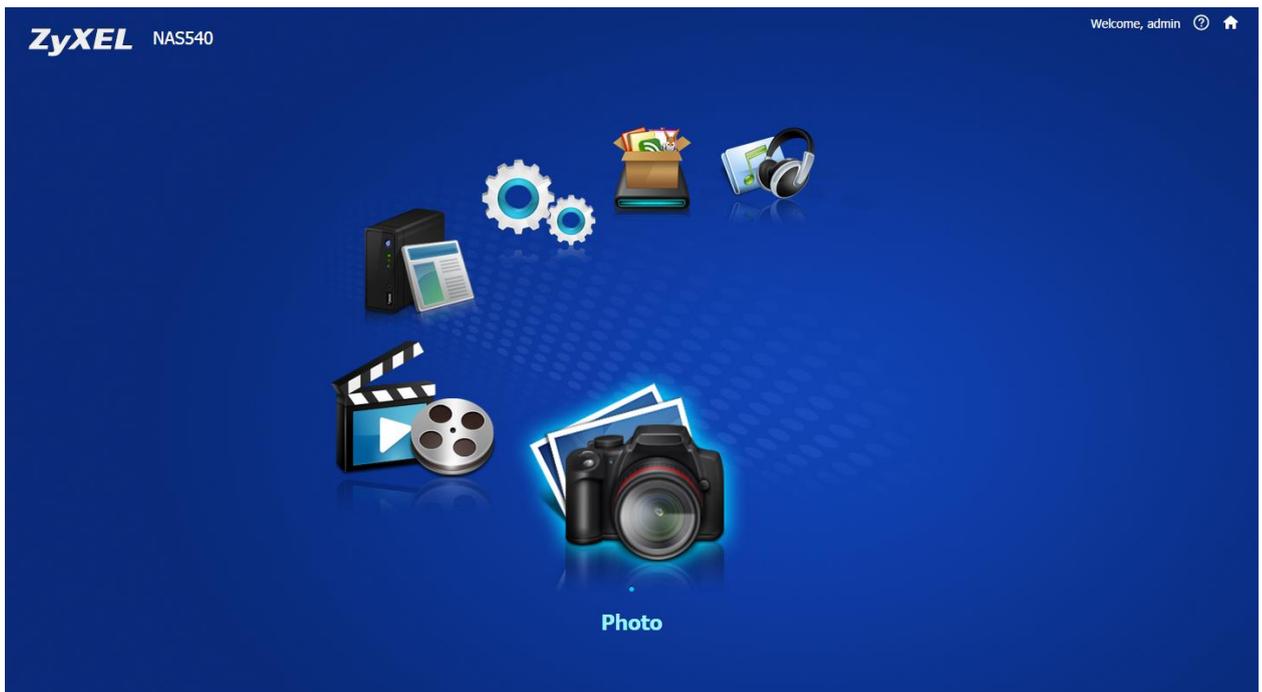
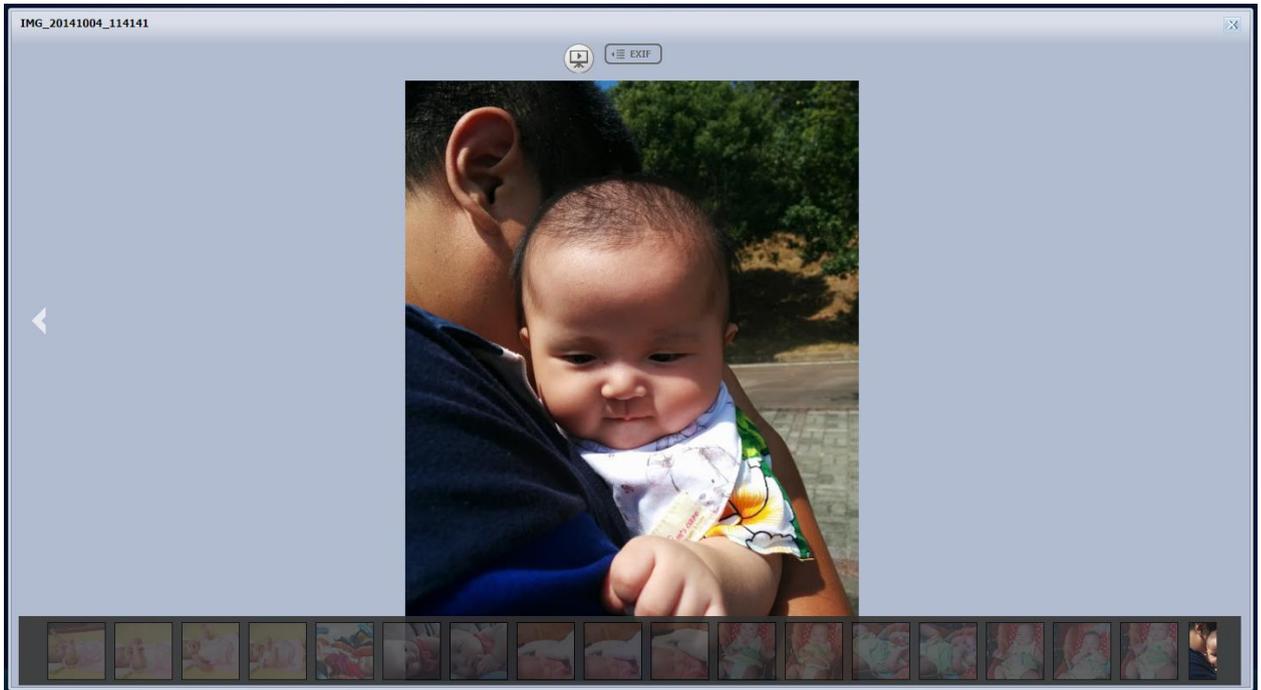


Photo screen



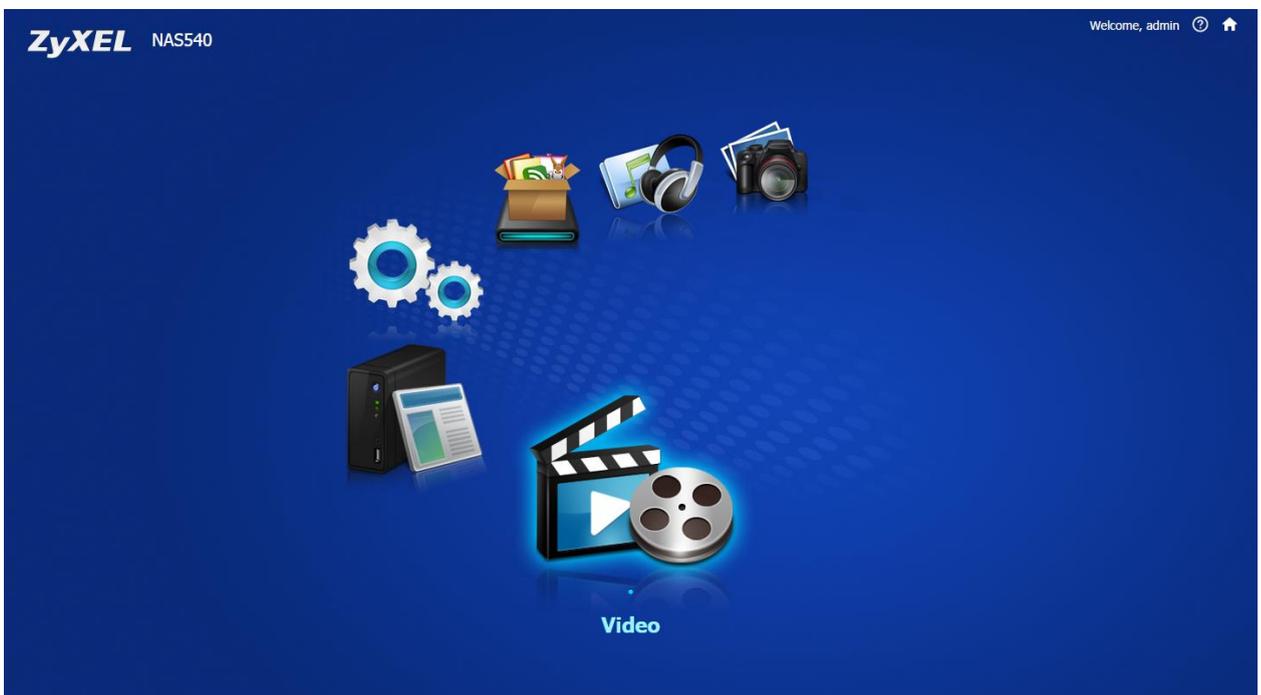
Check photo files in Playzone



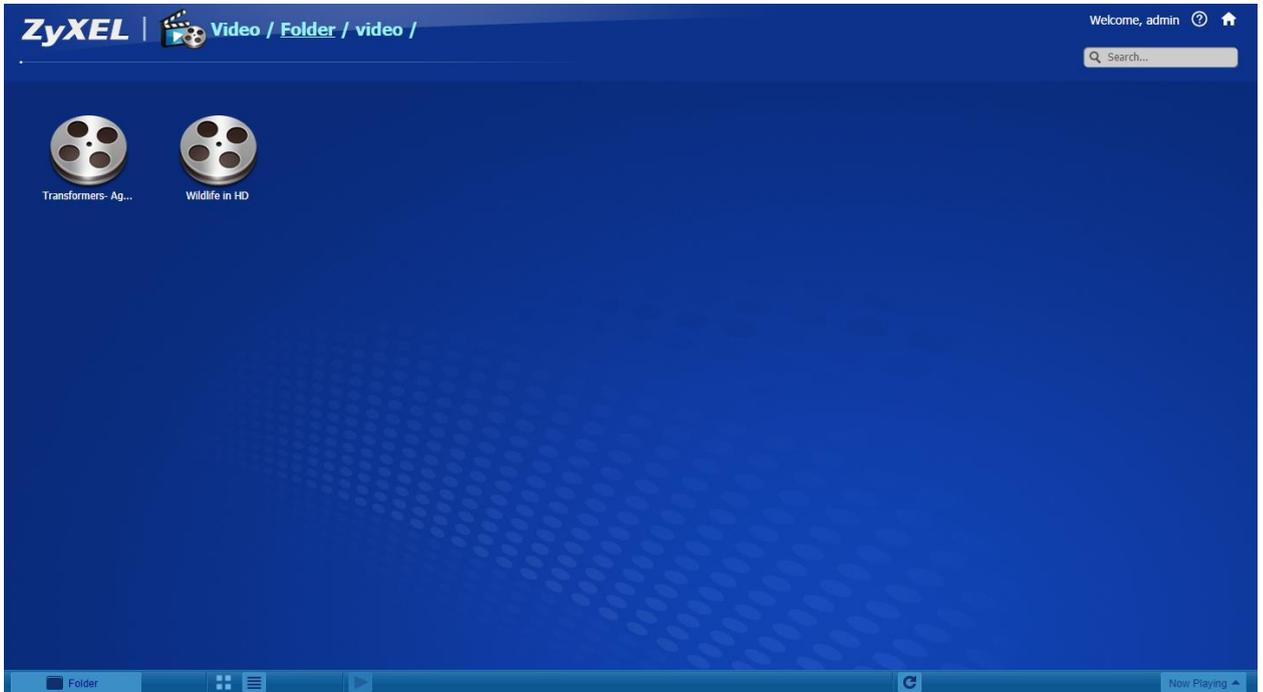
Review photo

## 5.6 Video

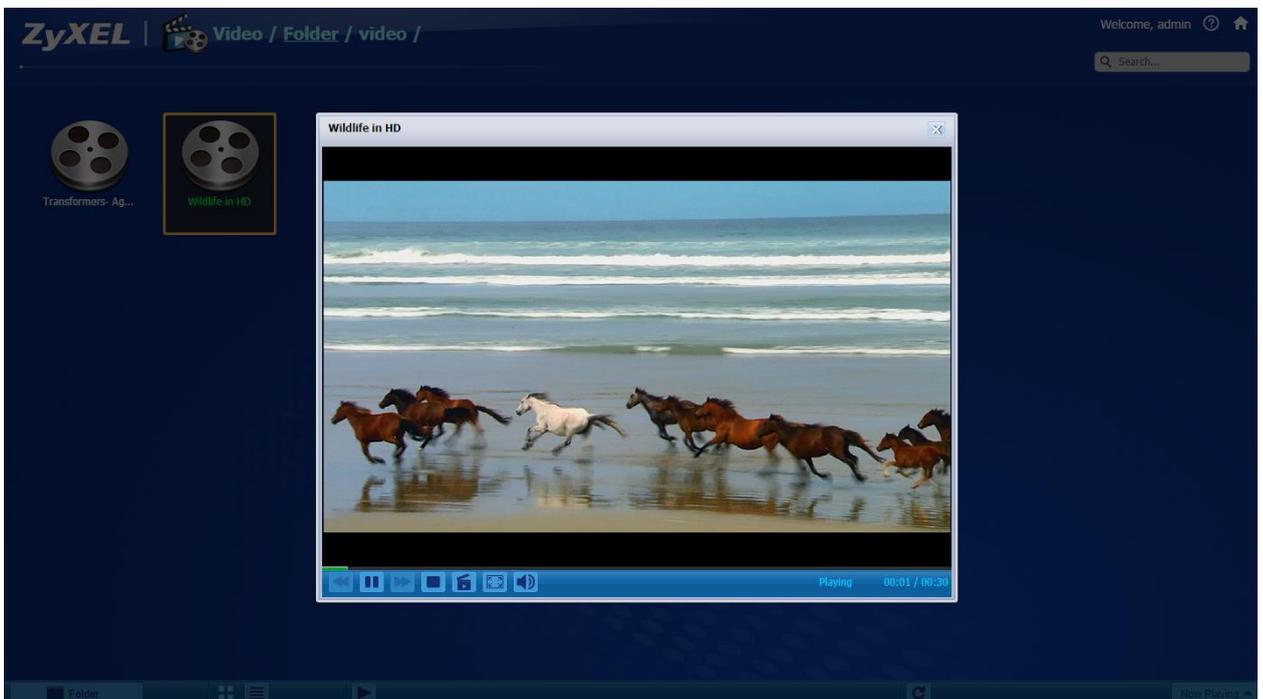
Use **Video** to view and play video files in the shares that publish videos.



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.

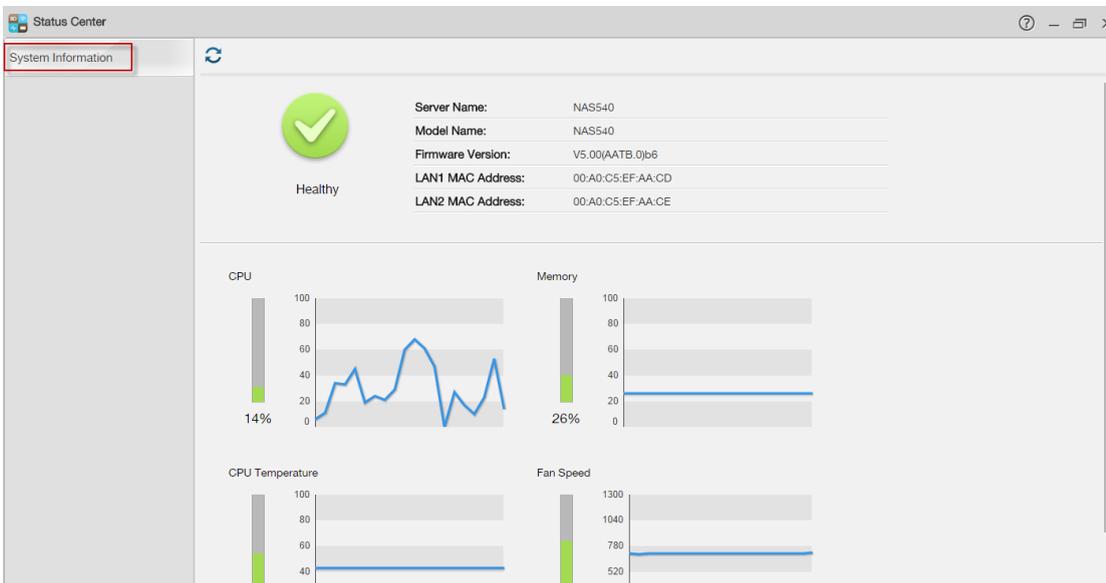
## 6. Status Center

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

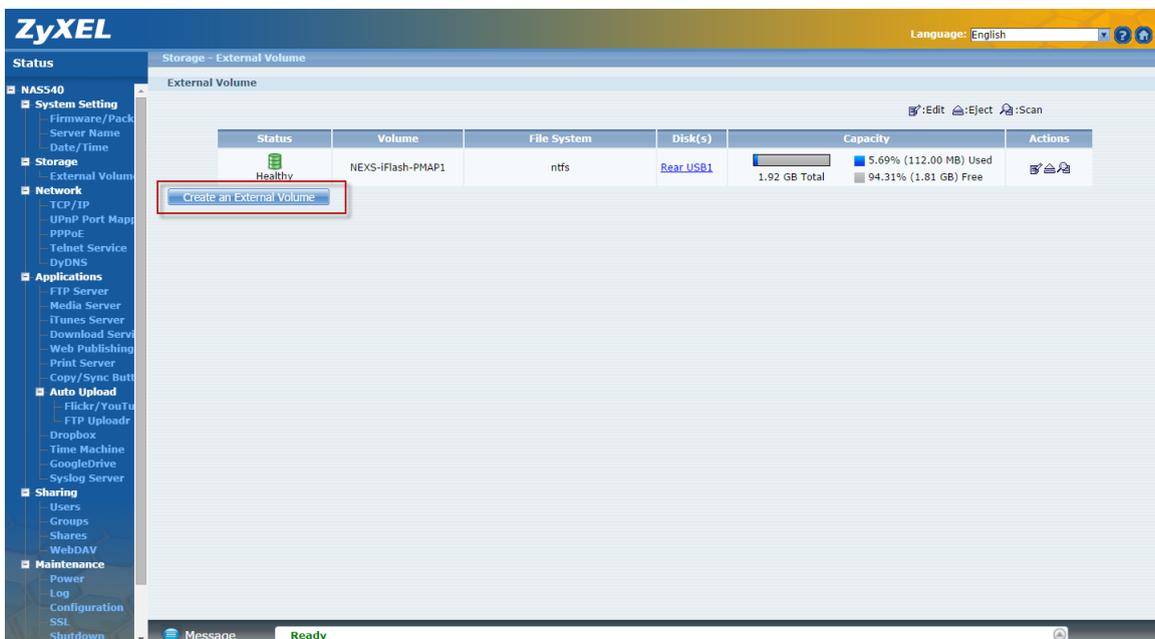
Use this screen to create and edit external volumes on USB-connected storage and SD cards.



DeskTop -> External Volume

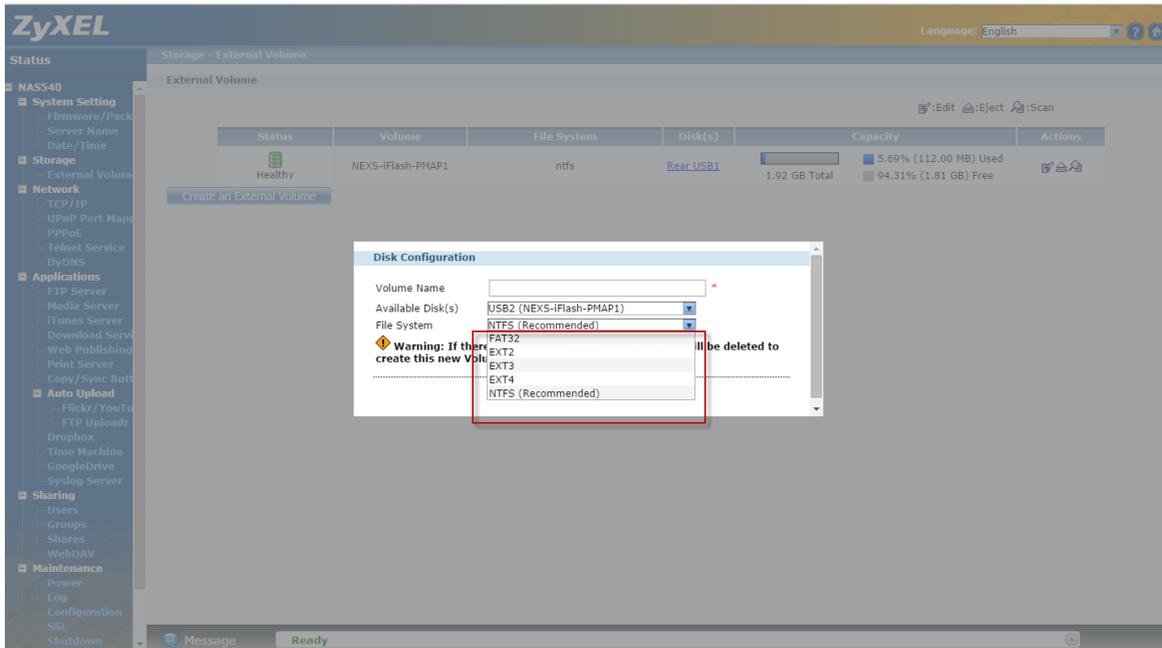
This page displays information on all external volumes (created on external disk drives attached to the NAS USB ports).

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

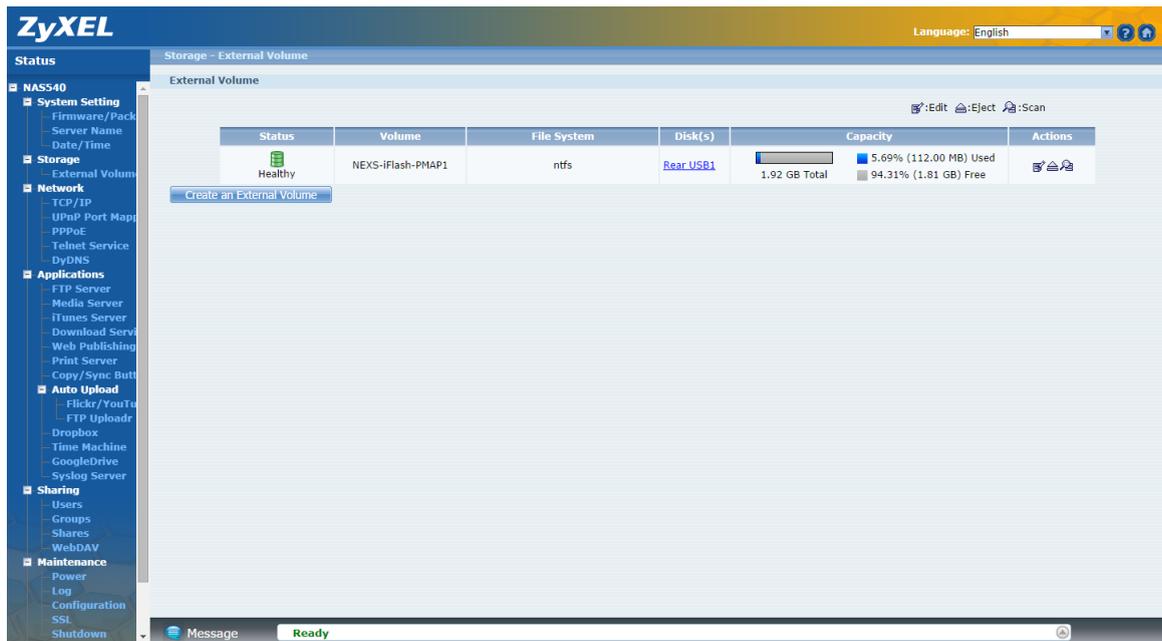


Create external volume in this page

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

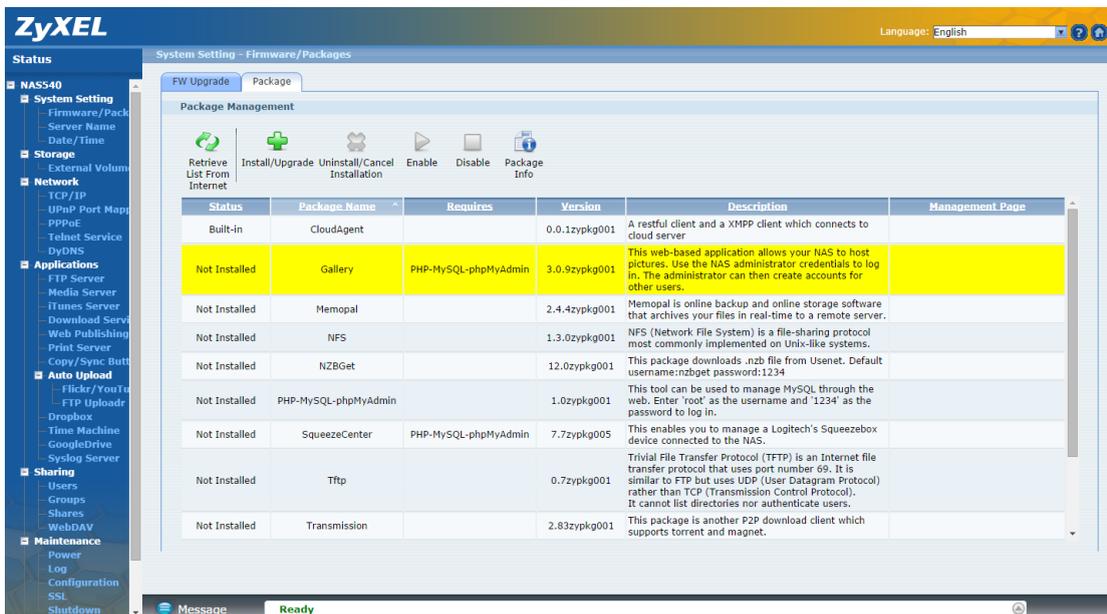
## 8. APP Center

Display the Package Management administrator configuration screen in a new tab.



Desktop -> App Center

Use this screen to download and install applications from the web.



Package screen

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
- SqueezeCenter
- TFTP
- Transmission
- WordPress
- ownCloud
- pyLoad

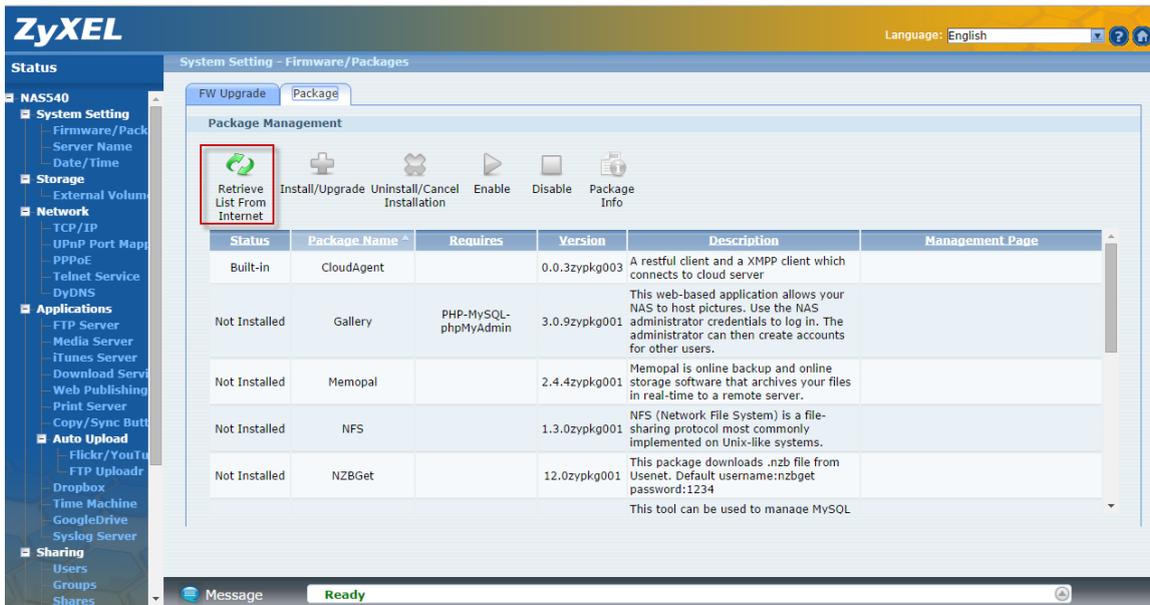
Click **System Setting > Firmware/Packages** to display the screen. Then the applications are will be listed as shown below.

The screenshot shows the 'System Setting - Firmware/Packages' interface. At the top, there are tabs for 'FW Upgrade' and 'Package'. Below the tabs is a 'Package Management' section with several icons: 'Retrieve List From Internet', 'Install/Upgrade', 'Uninstall/Cancel Installation', 'Enable', 'Disable', and 'Package Info'. The main content is a table with the following columns: Status, Package Name, Requires, Version, Description, and Management Page.

Status	Package Name	Requires	Version	Description	Management Page
Built-in	CloudAgent		0.0.3zypkg003	A restful client and a XMPP client which connects to cloud server	
Not Installed	Gallery	PHP-MySQL-phpMyAdmin	3.0.9zypkg001	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	Memopal		2.4.4zypkg001	Memopal is online backup and online storage software that archives your files in real-time to a remote server.	
Not Installed	NFS		1.3.0zypkg001	NFS (Network File System) is a file-sharing protocol most commonly implemented on Unix-like systems.	
Not Installed	NZBGet		12.0zypkg001	This package downloads .nzb file from Usenet. Default username:nzbget password:1234	
Enabled	PHP-MySQL-phpMyAdmin		1.0zypkg001	This tool can be used to manage MySQL through the web. Enter 'root' as the username and '1234' as the password to log in.	
Uninstalling	SqueezeCenter	PHP-MySQL-phpMyAdmin	7.7zypkg005	This enables you to manage a Logitech's Squeezebox device connected to the NAS.	
Not Installed	Tftp		0.7zypkg001	Trivial File Transfer Protocol (TFTP) is an Internet file transfer protocol that uses port number 69. It is similar to FTP but uses UDP (User Datagram Protocol) rather than TCP (Transmission Control Protocol). It cannot list directories nor authenticate users.	
Not Installed	Transmission		2.83zypkg001	This package is another P2P download client which supports torrent and magnet.	
Not Installed	WordPress	PHP-MySQL-phpMyAdmin	3.9.1zypkg001	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.	
Not Installed	ownCloud	PHP-MySQL-phpMyAdmin	7.0.2zypkg001	This allows you to create and manage your private cloud.	
Not Installed	pyLoad		0.4.9zypkg001	Have the NAS manage your downloads including those from one-click-hosting sites.	

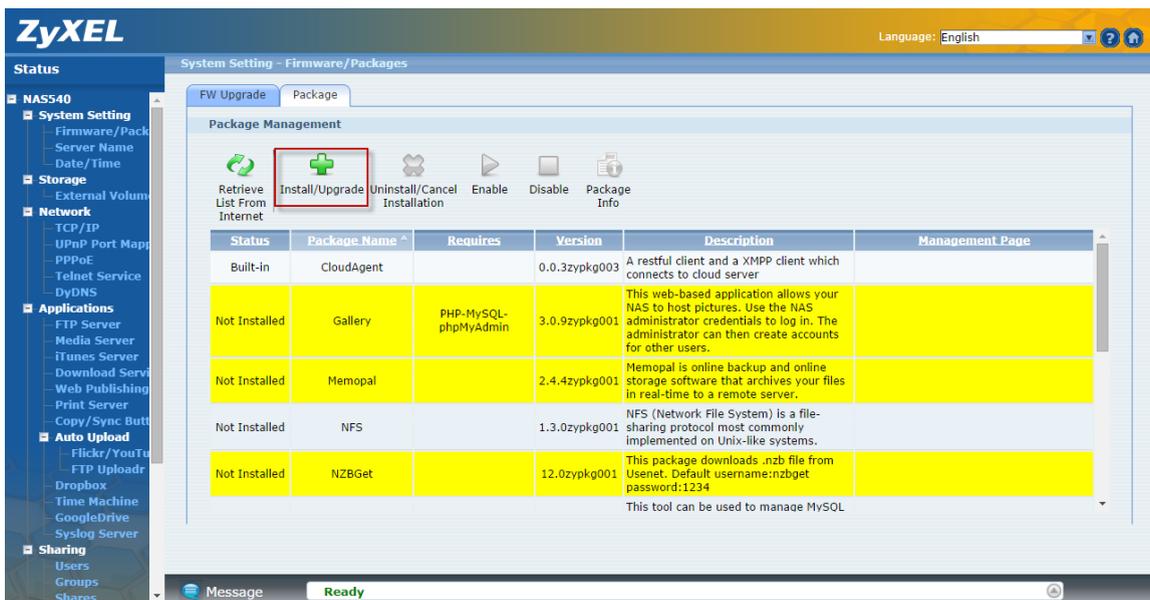
Package list

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.

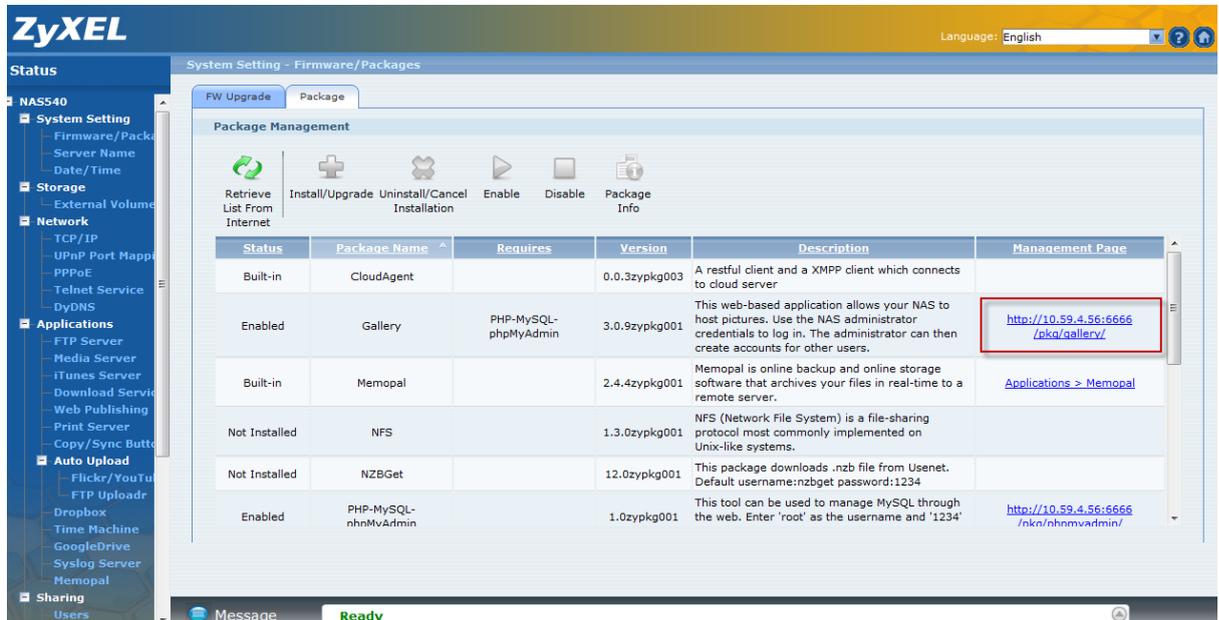


Install packages

## 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.

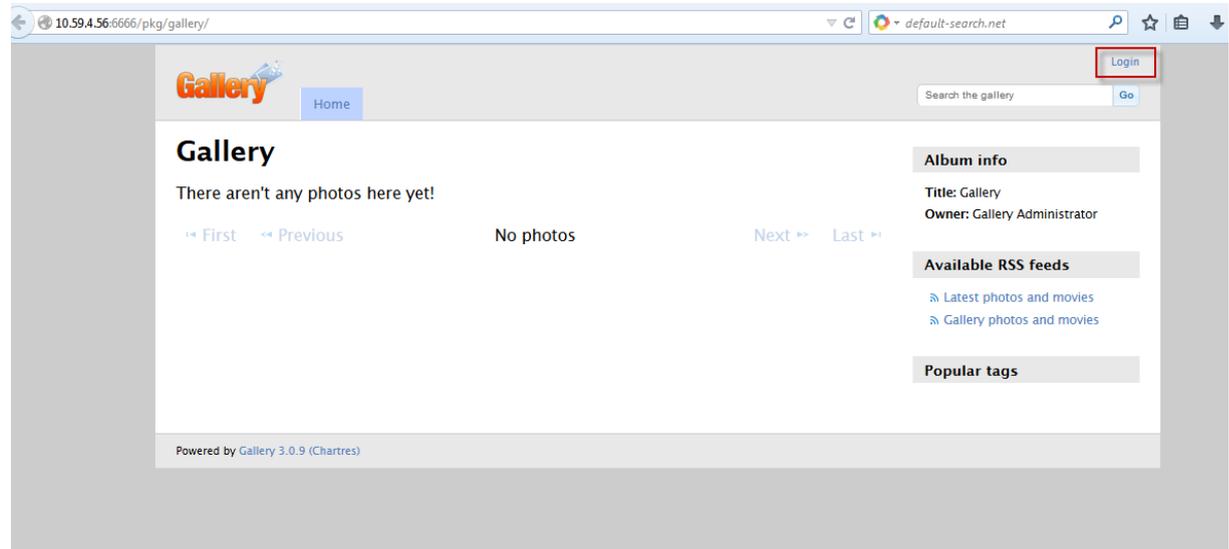
(The Google Chrome browser blocks port 6666. Therefore we suggest using Firefox to enable the Gallery page).



The screenshot shows the ZyXEL System Setting interface for Firmware/Packages. The Package Management section contains a table with the following data:

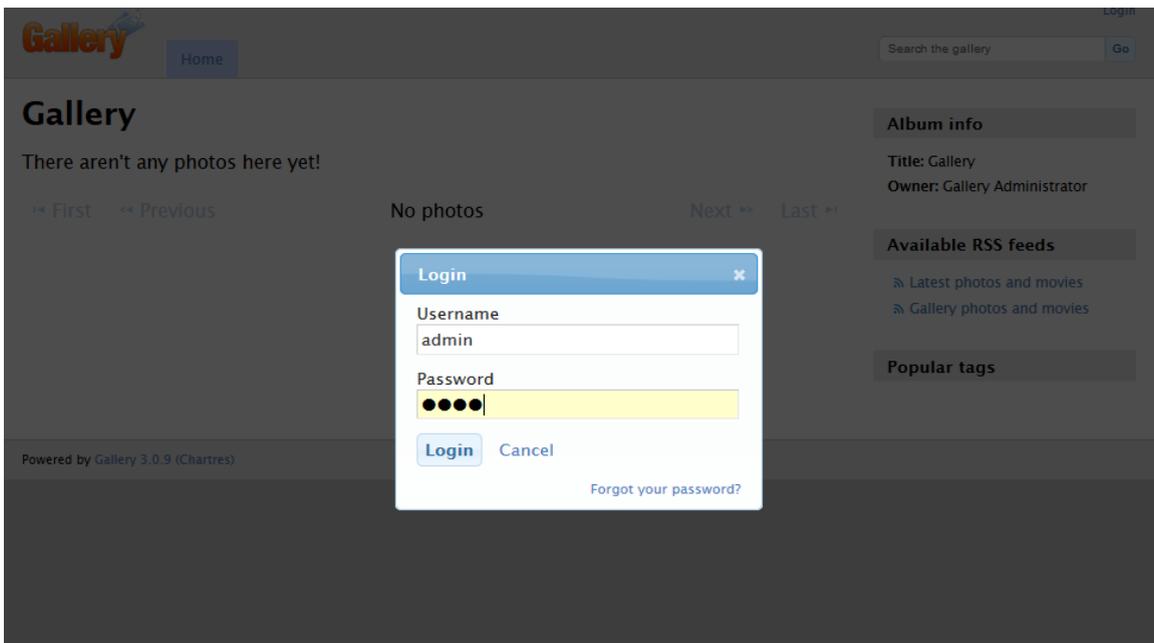
Status	Package Name	Requires	Version	Description	Management Page
Built-in	CloudAgent		0.0.3zypkg003	A restful client and a XMPP client which connects to cloud server	
Enabled	Gallery	PHP-MySQL- phpMyAdmin	3.0.9zypkg001	This web-based application allows your NAS to host pictures. Use the NAS administrator credentials to log in. The administrator can then create accounts for other users.	<a href="http://10.59.4.56:6666/pkg/gallery/">http://10.59.4.56:6666/pkg/gallery/</a>
Built-in	Memopal		2.4.4zypkg001	Memopal is online backup and online storage software that archives your files in real-time to a remote server.	<a href="#">Applications &gt; Memopal</a>
Not Installed	NFS		1.3.0zypkg001	NFS (Network File System) is a file-sharing protocol most commonly implemented on Unix-like systems.	
Not Installed	NZBGet		12.0zypkg001	This package downloads .nzb file from Usenet. Default username:nzbget password:1234	
Enabled	PHP-MySQL-nhnMvAdmin		1.0zypkg001	This tool can be used to manage MySQL through the web. Enter 'root' as the username and '1234'	<a href="http://10.59.4.56:6666/nkn/nhnmvdmin/">http://10.59.4.56:6666/nkn/nhnmvdmin/</a>

Go to Gallery page

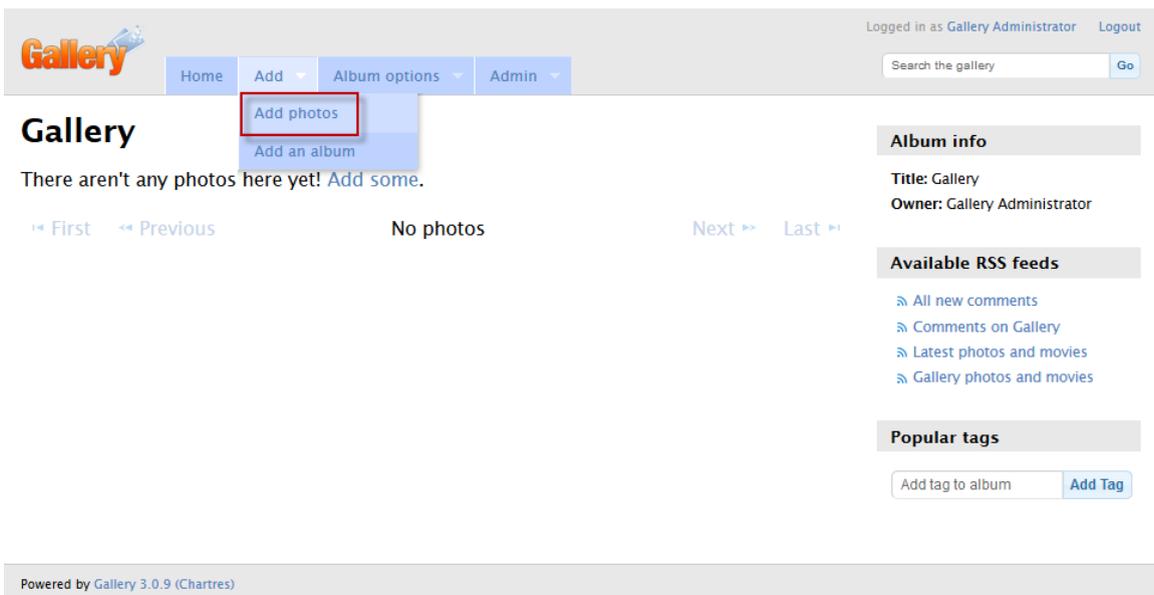


The screenshot shows the Gallery web application GUI. The page title is "Gallery" and it displays "There aren't any photos here yet!". The interface includes a search bar, a "Login" button, and sections for "Album info" (Title: Gallery, Owner: Gallery Administrator), "Available RSS feeds" (Latest photos and movies, Gallery photos and movies), and "Popular tags". The footer indicates "Powered by Gallery 3.0.9 (Chartres)".

Enter Gallery GUI



*Use Admin account to login*



*Add photos to Gallery*

**Add photos to Gallery** ✕

**⚠ Movie uploading is disabled on your system. [Help!](#)**

» **Gallery**

Select photos (100M max per file)...

IMG\_20140815\_231419.... (1.75MB) - 100% ✕

IMG\_20140830\_115800.... (2.19MB) ✕

IMG\_20140907\_103601.... (2.06MB) ✕

Add tags to all uploaded files

*Add selected files*

**Gallery** Logged in as Gallery Administrator [Logout](#)

Home Add Album options Admin

Search the gallery

**Gallery**



Album info

Title: Gallery  
Owner: Gallery Administrator

Available RSS feeds

- All new comments
- Comments on Gallery
- Latest photos and movies
- Gallery photos and movies

Popular tags

Add tag to album

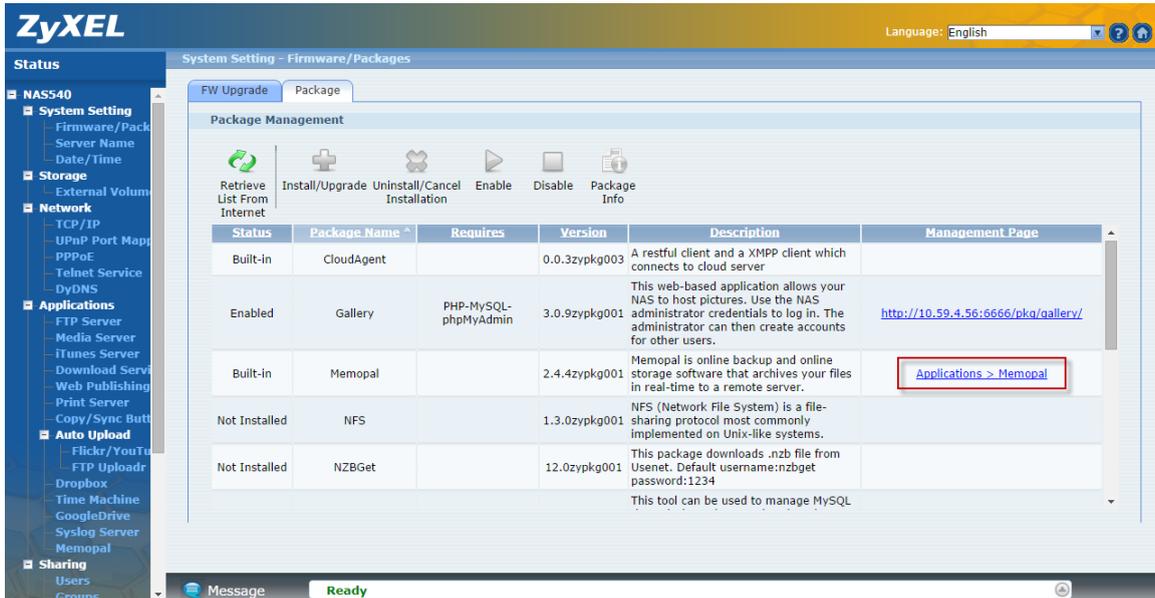
⏪ First ⏩ Previous Photos 1 - 3 of 3 Next ⏪ Last ⏩

Powered by [Gallery 3.0.9 \(Chartres\)](#)

*Then you can view the uploaded photos and edit photos in the screen*

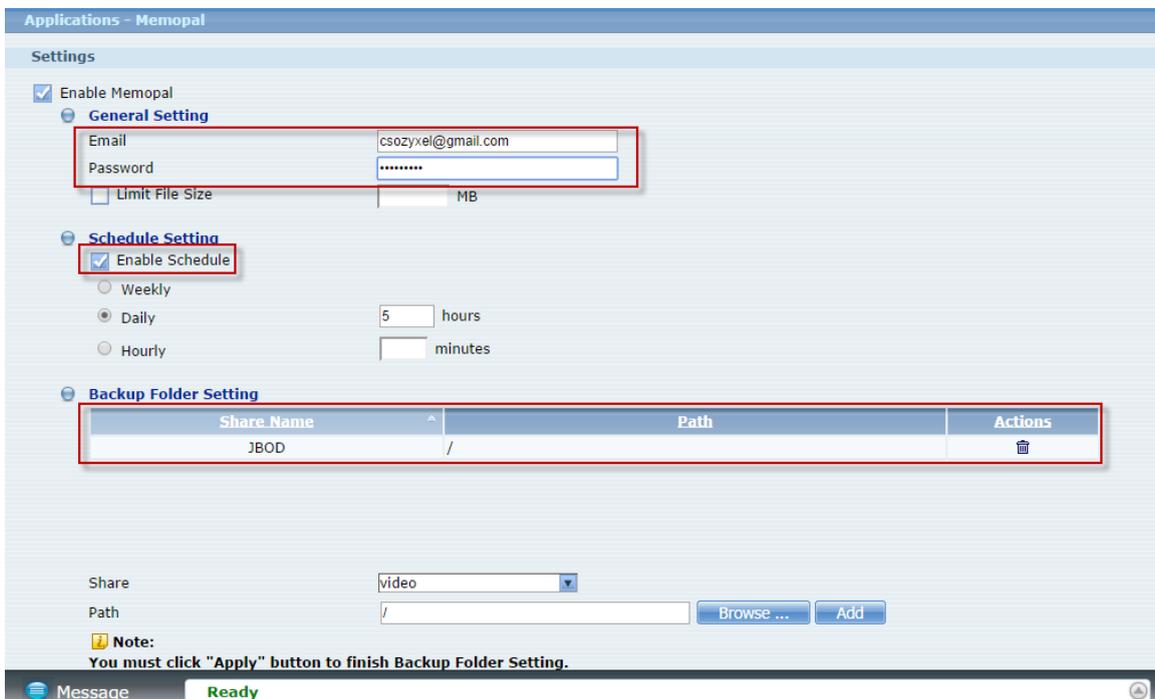
## 8.2 Memopal

Install the Memopal package to back up folders of files on the NAS to your Memopal online backup and storage account.



Go to Memopal page

Type the email account and password of Memopal. Then set the schedule and backup folder.



Memopal screen

The backup job is initializing and the NAS is getting ready to backup.

The screenshot shows the Memopal web interface. The 'Status' section is highlighted with a red box and contains the following data:

Status	Starting
To Backup	0
Backed up	0
Failures	0
Upload Speed	0 B/s
Progress	--

Below the status table are three buttons: 'Restart Backup', 'Retry Failures', and 'Backup Report'. A note below states: 'Note: Size limitation of single file is 1GB.' The 'Settings' section is partially visible, showing 'Enable Memopal' checked, 'General Setting' expanded, and 'Schedule Setting' expanded with 'Enable Schedule' checked and 'Daily' selected at 5 hours.

At the bottom, a system message bar shows 'Message Ready'.

Check the Memopal status

The backup job finished.

The screenshot shows the Memopal web interface after the backup is complete. The 'Status' section is highlighted with a red box and contains the following data:

Status	Completed
To Backup	0
Backed up	1
Failures	0
Upload Speed	0 B/s
Progress	100.00%

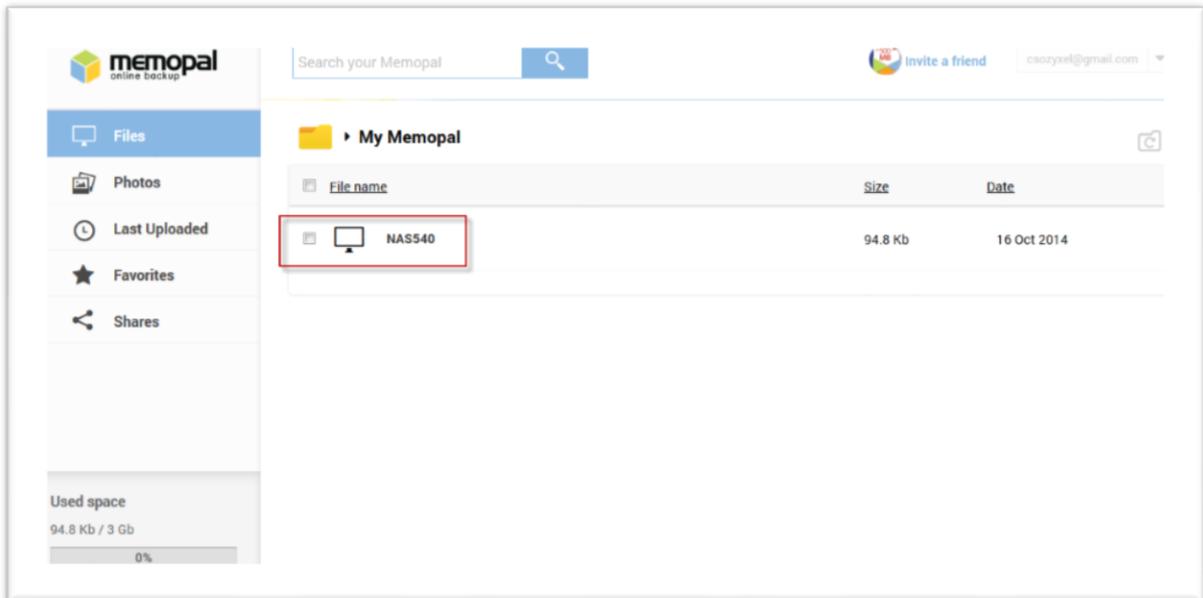
Below the status table are three buttons: 'Restart Backup', 'Retry Failures', and 'Backup Report'. A note below states: 'Note: Size limitation of single file is 1GB.' The 'Settings' section is visible, showing 'Enable Memopal' checked, 'General Setting' expanded, and 'Schedule Setting' expanded with 'Enable Schedule' unchecked. A 'Backup Folder Setting' table is also visible:

Share Name	Path	Actions
JBOD	/	

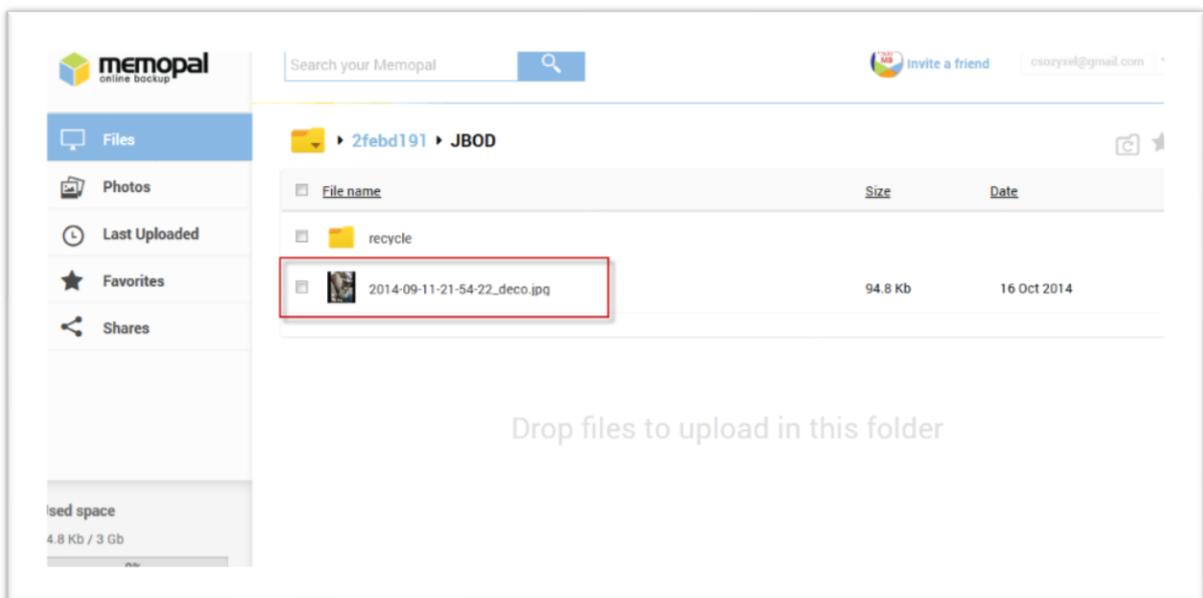
At the bottom, a system message bar shows 'Message Ready'.

Finish upload

Check your Memopal online backup.



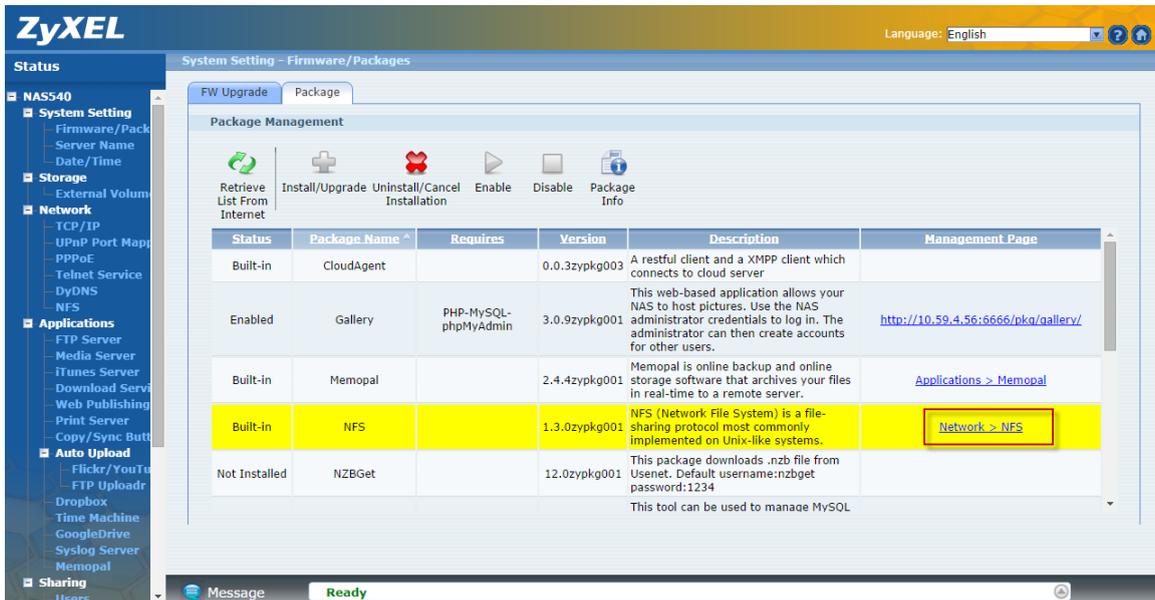
Login to the online Memopal



Check if the files have been upload from NSA540

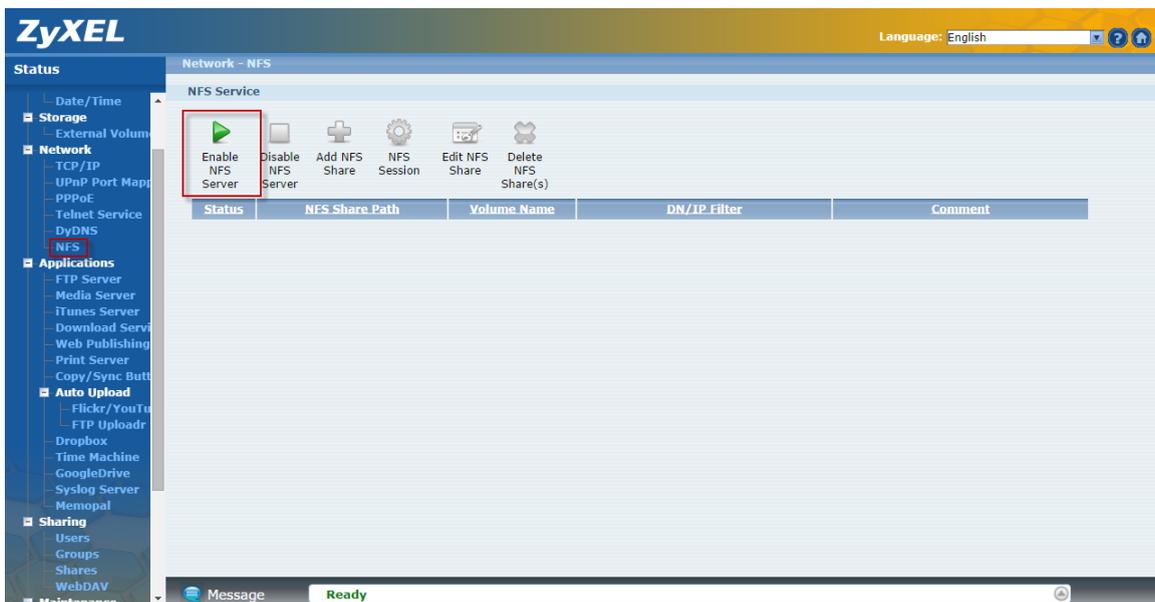
## 8.3 NFS

**NFS** (Network File System) is a file-sharing protocol most commonly implemented on Unix-like systems.



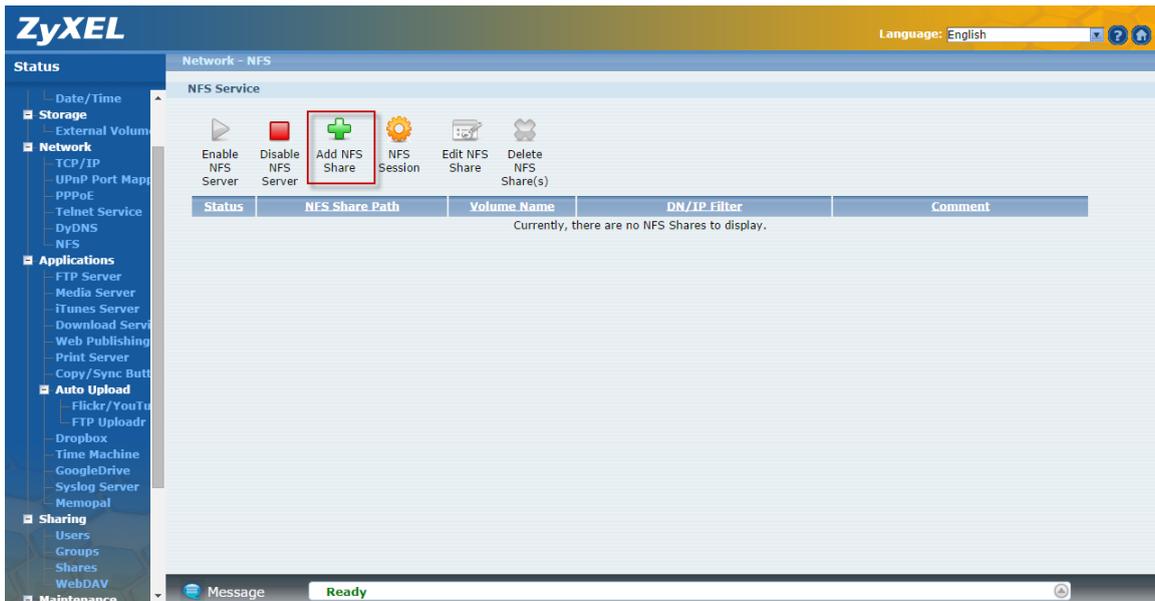
Go to NFS page

Go to **Network > NFS**



Enable NFS

Click this to employ NFS in your NAS.



Add the NFS Share

Use this screen to add or edit an NFS share.

Setting Volume Name, NFS Share Name and DN/IP Filter for NFS rule.

**Add NFS Share**

Volume Name:

NFS Share Name:

Full Path:

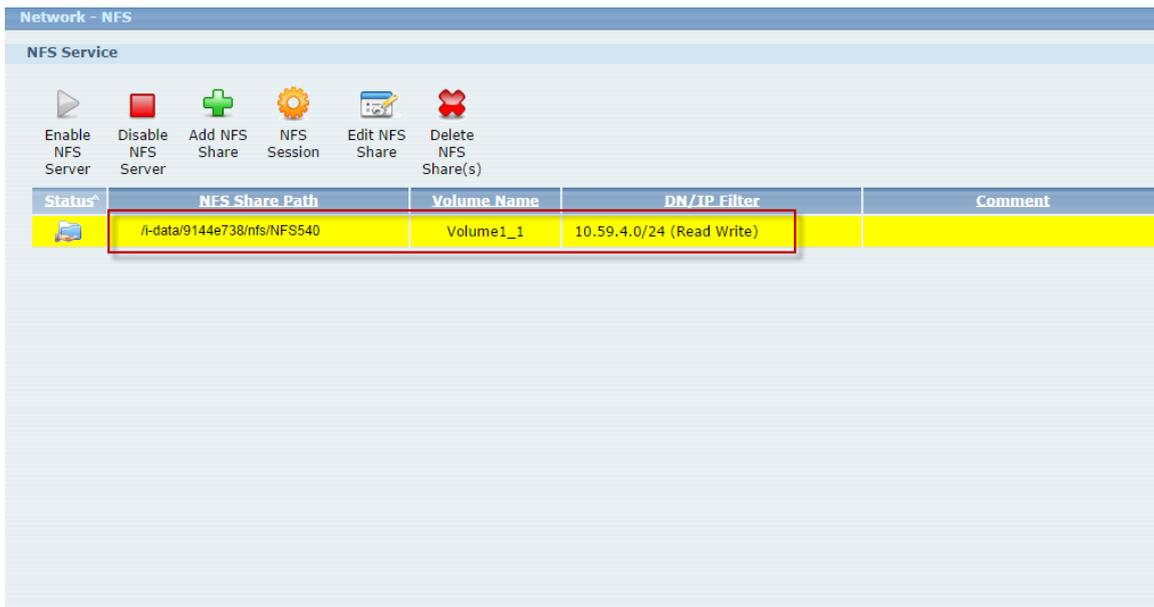
Comment:

DN/IP Filter:

**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

Edit the NFS Share.

Check the NFS rule after setting finish.



The NFS editing is complete

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

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

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

```
[root@dhcpcpc16 ~]# /etc/init.d/rpcbind start
[root@dhcpcpc16 ~]# /etc/init.d/nfslock start
[root@dhcpcpc16 ~]# _
```

Verify that the NFS server has exported the directory:

```
# showmount -e ServerName
```

```
root@ubuntu:/home# showmount -e 10.59.4.56
Export list for 10.59.4.56:
/i-data/9144e738/nfs/NAS540 10.59.4.0/24
```

Create a mount point for the remote resource using the mkdir command:

```
# mkdir -p /local/directory
```

```
root@ubuntu:~# mkdir -p /home/NAS540
root@ubuntu:~# cd /home
root@ubuntu:/home# ls
NAS540
```

Mount share of NAS540:

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

```
root@ubuntu:/home# mount -t nfs 10.59.4.56:/i-data/9144e738/nfs/NAS540 /home/NAS540
```

where ServerName is the name of the NFS server, /remote/directory is the directory on the NFS server you want to mount, and /local/directory is the mount point on the NFS client.

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

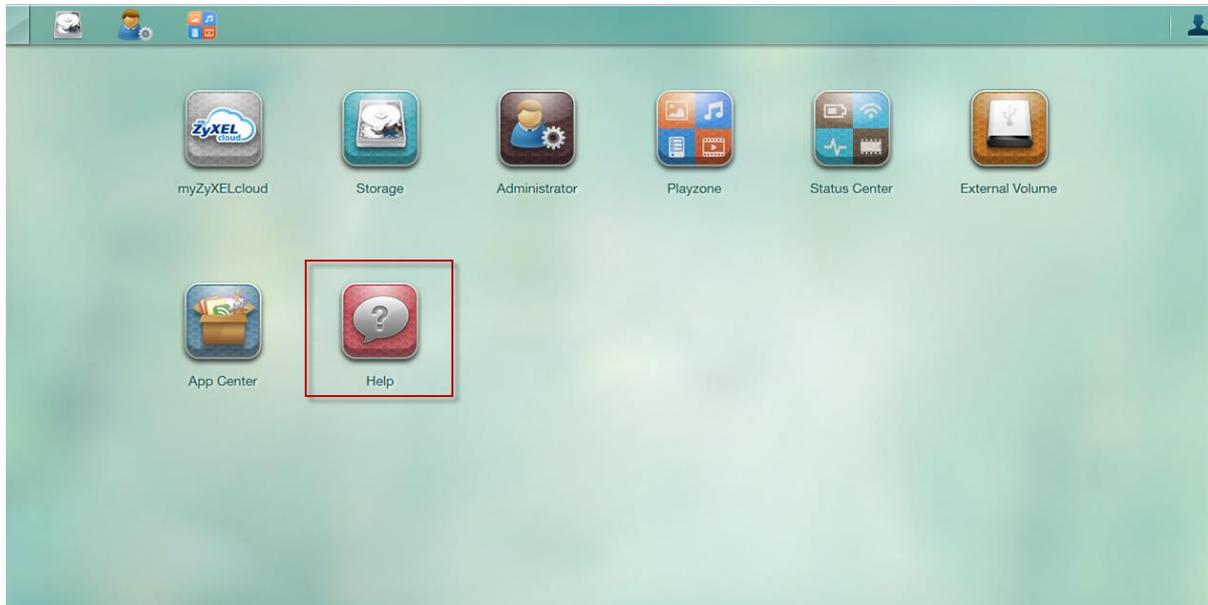
```
#df
```

```
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
10.59.4.56:/i-data/9144e738/nfs/NAS540	309637120	4512288	305124832	2%	
/home/NAS540					

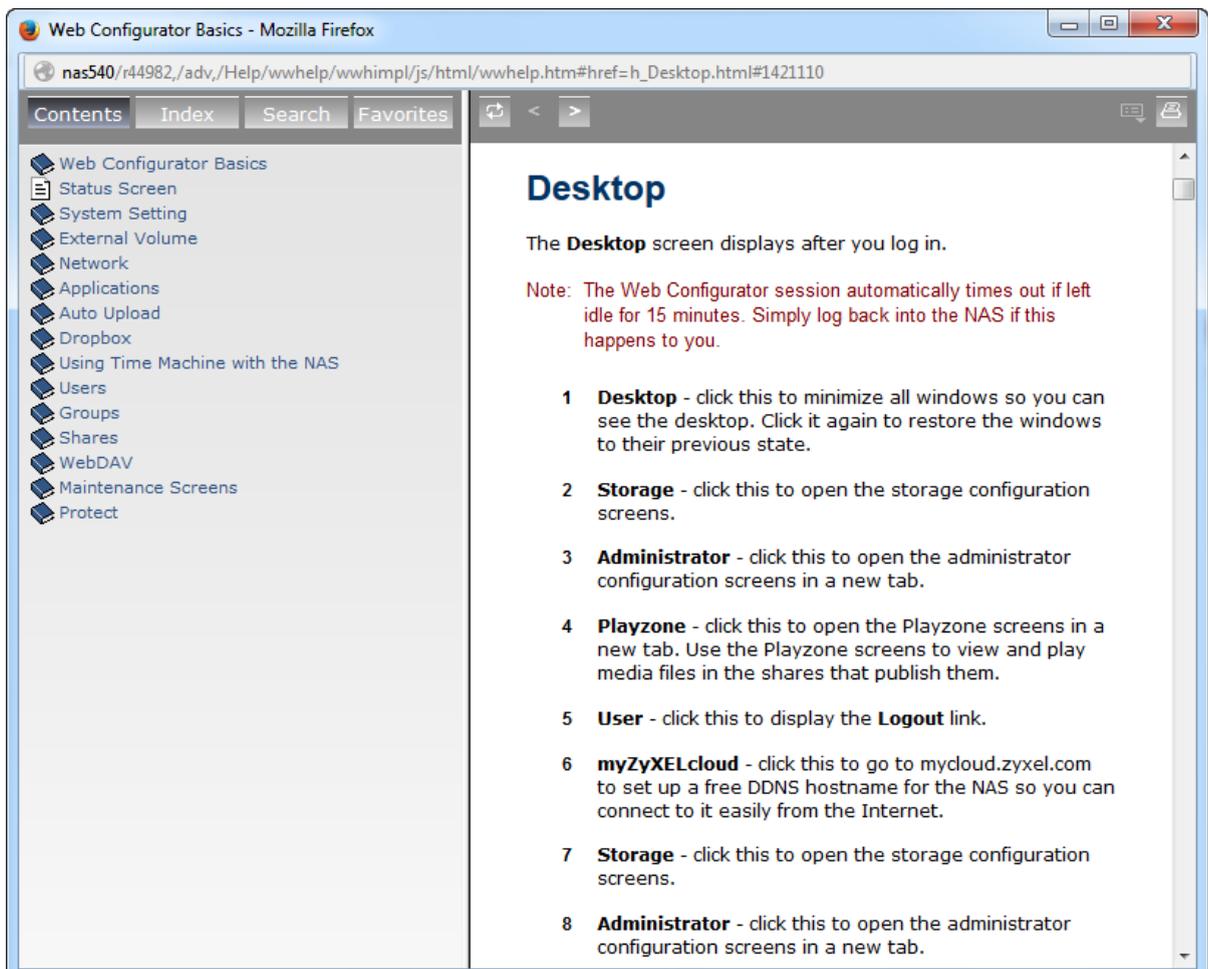
## 9. Help

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



DeskTop > Help

Web Help to easy understand for each screen.



Help screen

## 9.1 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 NAS540/NAS542?

NAS supports Raid 5, Raid 6, Raid 10, Raid 1, JBOD, or RAID0.

### 3. Which file system is supported by the NAS540/NAS542?

Internal file system: EXT4

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

### 4. Which kind of multimedia server does the NAS540/NAS542 support?

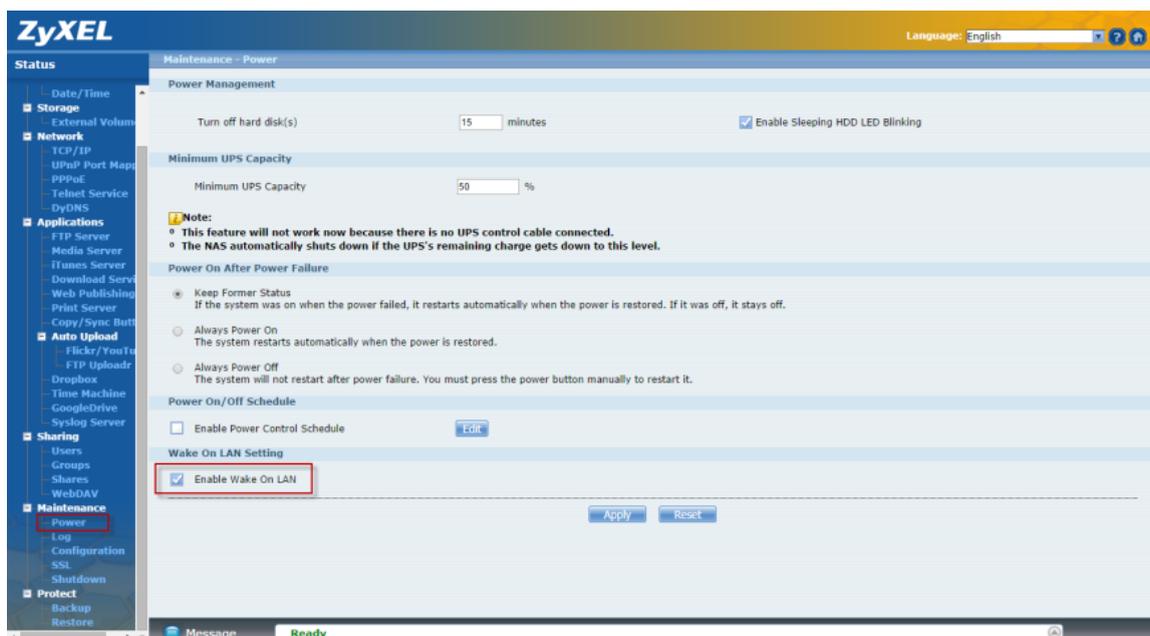
NAS supports Squeeze Center, Twonky server, UPnP AV Server, and iTunes Server.

### 5. Does the NAS540/NAS542 support a DLNA media server?

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

### 6. What is the feature “Wake On LAN”?

You can turn on the NAS 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 NAS that supports sending magic packets.



**7. Which types of video file formats are supported by the NAS540/NAS542?**

NAS 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 NAS540/NAS542?**

NAS 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 NAS540/NAS542?**

NAS supports bitmap, JPEG, and PNG.

**10. Which types of web browsers are supported by the NAS540/NAS542?**

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