

Conceptronic

CH3SNAS

Grab'n'GO Media Store

Dual SATA-HDD NAS Storage

User's Manual

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1. Introduction

Congratulations on purchasing the Conceptronic Grab'n'GO Media Storage Server with RAID 0/1, the easiest and fastest way to share data, files and multimedia on your network.

This Storage Server contains two 3.5" SATA hard disk interfaces, allowing you to build a mass-storage center for backing up your valued data. In addition, it supports RAID 1 mirroring technology that can effectively prevent your data from being lost because of the hard disk failure. (Note: You have to install two hard disk drives to take advantage of the RAID 1 mirroring technology.) It also supports other features such as Standard, JBOD and RAID 0.

The Storage Server is specially designed for businesses and SOHO that demand high-capacity and high-performance solution that can be securely and easily accessed through any web browser. The included Installation CD provides an exclusive utility - Easy Search, which allows you to locate the Storage Server on the network and map drives to your computer.

With the ease-to-use and high-performance features, the Conceptronic Grab'n'GO Media Storage Server with RAID 0/1 is the ideal solution for any network.

Package Contents

Unpack the package and check all the items carefully, and be certain that you have:

- ◆ 1 Conceptronic CH3SNAS Storage Server.
- ◆ 1 AC power adapter (12v, 3A & 5v, 3A) and power cord.
- ◆ 1 Cat 5 Ethernet cable.
- ◆ 1 Cable Hook.
- ◆ 1 Quick Installation Guide.
- ◆ 1 Installation CD containing the Easy Search utility and the User Manual (PDF file).

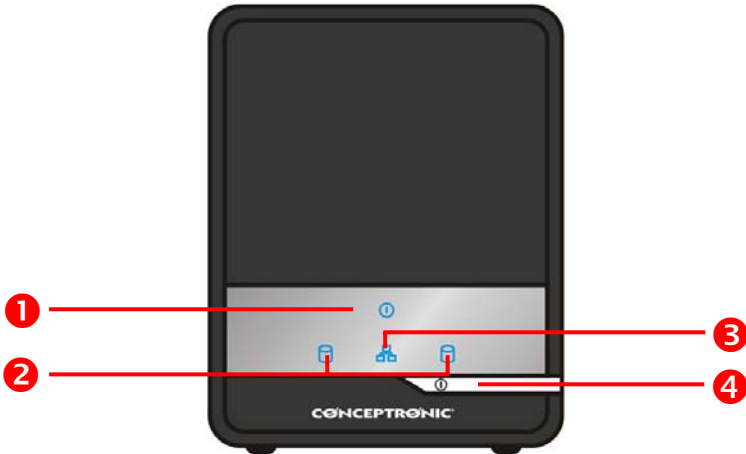
If any item contained is damaged or missing, please contact your local dealer immediately. Also, keep the box and packing materials in case you need to ship the unit in the future.

General Features

- ◆ Provides one 10/100/1000 Mbps Gigabit LAN port(Support Auto-MDIX)
- ◆ Embedded Dual SATA 3.5" HDD interface
- ◆ 4 HDD configurations: Standard, JBOD, RAID 0, RAID 1
- ◆ 2 modes supported: Open mode and Account mode
- ◆ IP assignment support for DHCP and Static
- ◆ Automatically find & play iTunes Server
- ◆ Supports FTP/HTTP(S) Schedule download/backup
- ◆ Supports DHCP Server
- ◆ Supports Quota for assignment users/groups
- ◆ Supports Power Management of HDD
- ◆ Supports Auto FAN Speed Control with thermal sensor
- ◆ Automatic E-mail Alert system
- ◆ Supports UPnP AV Server
- ◆ Supports M3U Play-list files for UPnP AV Server (up to 256 records)
- ◆ Supports USB Printer Server
- ◆ Supports NTP Server for system time synchronization
- ◆ Supports Easy Search Utility (for device discovery and configuration)

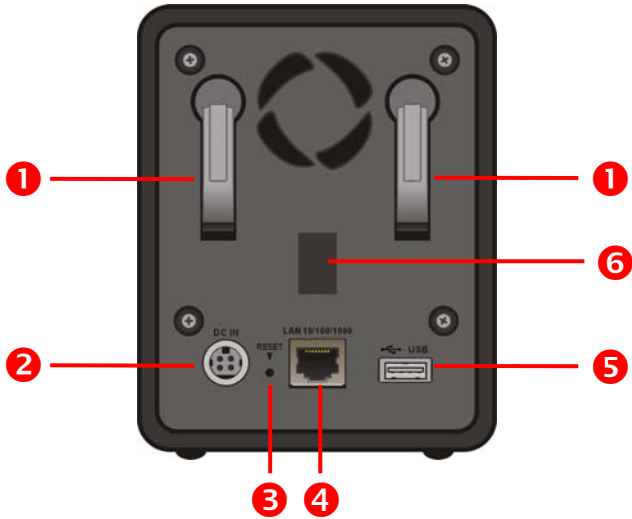
Product View

Front View



| Nr | Description | Explanation |
|----|--------------|--|
| 1. | Power LED | The steady Blue light indicates the server is powered on. |
| 2. | HDD1/2 LED | The steady Blue light indicates the hard disk drive(s) is connected but inactive. When it blinks, the hard disk drive(s) is reading/writing data. The steady Orange light indicates the hard disk drive(s) failed. |
| 3. | LAN LED | The steady Blue light confirms that the server has a good connection to your network. When it blinks, the storage server is receiving/transmitting data from/to the network. |
| 4. | Power Button | Press once to power on. Press and hold the button for 5 seconds to power off. |

Rear View



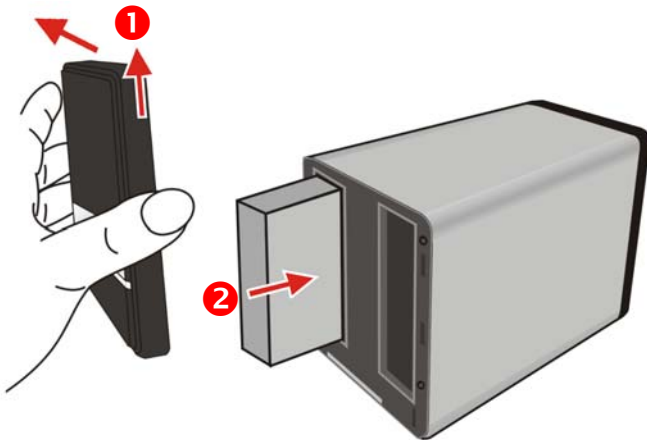
| Nr | Description | Explanation |
|----|-----------------|---|
| 1. | HDD Eject Lever | Use the lever(s) to eject the installed hard disk drive(s). The front panel must be removed before ejecting the hard disk drive(s). |
| 2. | Power Connector | Connect the provided AC power adapter. |
| 3. | Reset Button | Press and hold for 5 seconds to restore the default setting. |
| 4. | LAN Port | Connect the server to the local network through the Ethernet cable. |
| 5. | USB Port | Connect a USB printer. |
| 6. | Cable Hook Slot | Remove the rubber pad to attach the Cable Hook. The Cable Hook will fix the power cable to avoid the accident. |

2. Setup the Server

Hardware Installation

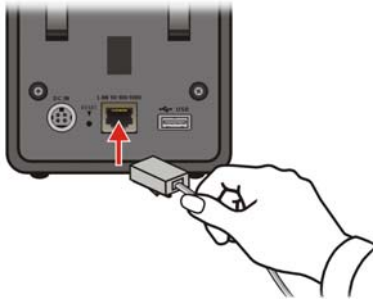
Installing Hard Disk Drive

1. Slide the front panel up and then pull it off the server to access the drive bays.
2. Insert 1 or 2 SATA 3.5" hard disk drives into the available drive bays until they are firmly connected to the SATA slot on the server.
3. Replace the front panel onto the server.



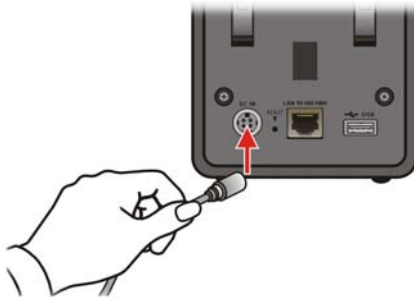
Connecting to the Network

Plug an Ethernet cable to the LAN port located on the server's rear panel, and then connect it to the network or directly to a computer for configuration.



Connecting the Power Adapter

Plug the AC power adapter to the DC power connector located on the server's rear panel, and then connect it to your local power supply.



Note: You can attach the provided Cable Hook to the slot to organize the connected cables on the rear panel of the server.

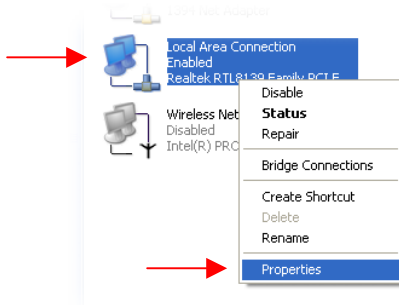
Note: Do not remove the Harddisk(s) from the CH3SNAS when the device is in use! This can cause data-loss!

Accessing the Server

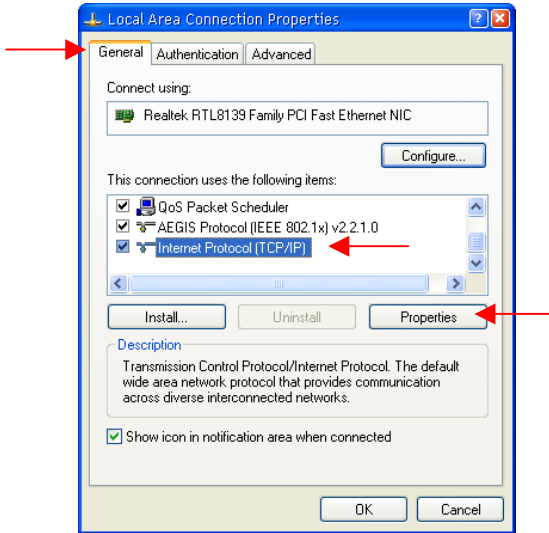
Configuring a Fixed IP Address

When you connect your computer to the storage server directly to configure the storage server, you need to check the computer's IP address, and set up the IP address within the storage server's IP address range.

1. Click **"Start"**, **"Run"**, enter the command **"NCPA.CPL"** and click **"OK"**. The Network Connection Window will appear.
2. Right-click the Local Area Connection icon and click **"Properties"** from the shortcut menu.



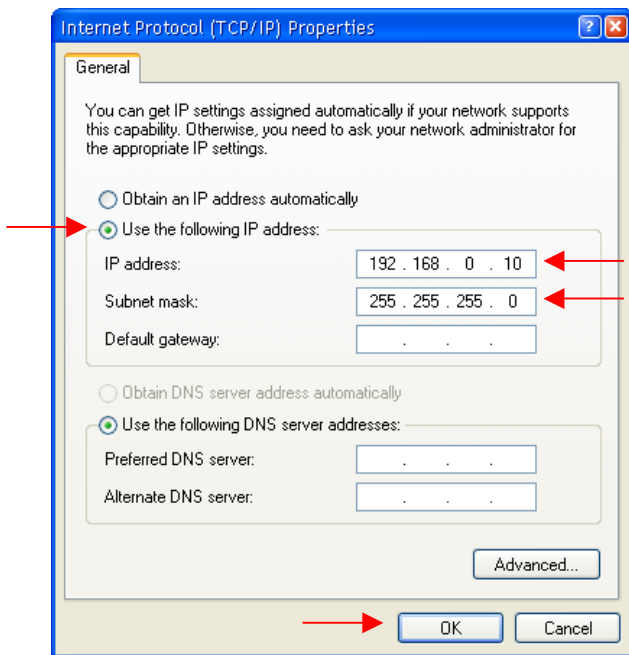
3. When the Local Area Connection Properties window appears, choose the “General” tab, select “Internet Protocol [TCP/IP]”, and click “Properties” to bring up the Internet Protocol [TCP/IP] Properties window.



4. Select the option “Use the following IP address”. Enter an IP Address in the empty field.

Note: The default IP Address of the CH3SNAS is 192.168.0.20. Make sure you set the IP Address of your computer in the same range as the CH3SNAS, for example:

IP Address : 192.168.0.10
Subnet Mask : 255.255.255.0



5. Click *OK* to complete the configuration.

Using the Easy Search Utility

To access and manage the storage server easily, the convenient utility **Easy Search** is provided for you on the Installation CD. **Easy Search** is a tool that allows you to set up the storage server's connection.

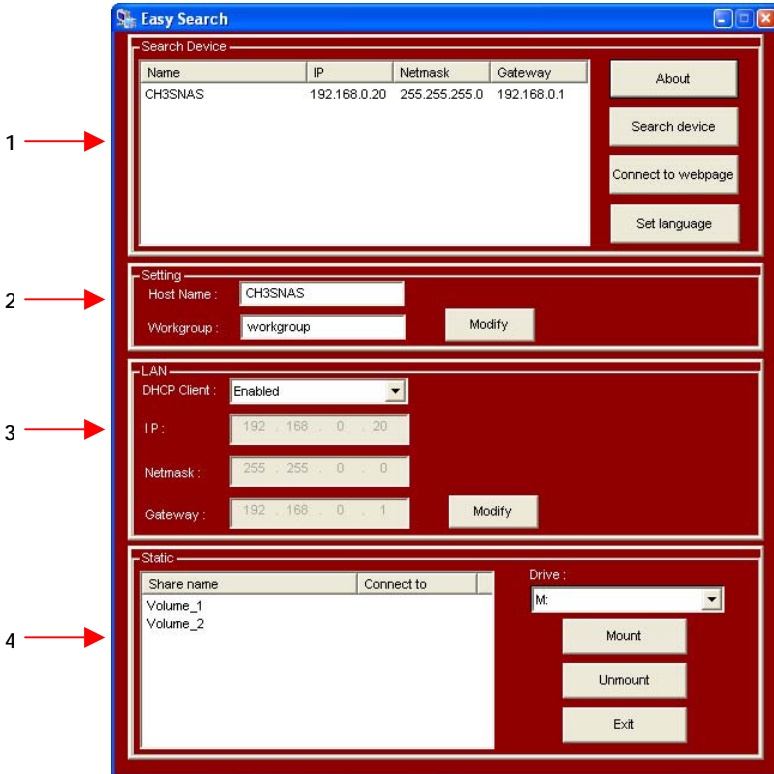
To use **Easy Search**:

1. Insert the CD-ROM in your CD-ROM Drive. The Autorun should appear automatically. If the Autorun menu does not appear, navigate to **"My Computer"** and double-click on the CD-ROM drive to start the Autorun menu.
2. Select the CH3SNAS Storage Server from the Autorun menu.
3. Select **"Start Easy Search Utility"** from the menu.



The Easy Search Utility will start.

Note: If you are using Windows XP SP2 or higher, you can get a firewall notice like shown below. Allow the Easy Search Utility in the firewall for the correct function of the utility.



| Nr | Option | Description |
|----|---------------|--|
| 1. | Search Device | When launching the utility, it will search the connected server(s) automatically, and display the results in the list. To refresh the list, click the Search device button again. Clicking the Connect to webpage button will launch the web browser and lead you to the configuration utility. You can change the displayed language by clicking the Set language button. |
| 2. | Setting | Assign the Host Name and Workgroup for the server. |
| 3. | LAN | By default, the server has a self-assigned IP address of "192.168.0.20". However, you can manually set up its networking configuration in this field by selecting Disable in the DHCP Client option. You can manually assign the IP address, Netmask and Gateway for the server. When you change the settings, click the Modify button to apply the updated configuration. |
| 4. | Static | The installed hard disk drive(s) is displayed in this field. You can assign a Drive Letter from the Drive list. Click the Mount button to map the selected drive. Click the Unmount button to disconnect the mapped drive. |

Click the "Exit" button to close the utility.

3. Web Configuration

You can access and manage the storage server through a web browser. This chapter provides you with instructions of the Web Configuration Utility, and explains how to set up your storage server with the web browser.

Web Configuration Utility

You can login the storage server in 2 ways:

1. Clicking the “Connect to webpage” button on the Easy Search control panel.
2. Opening the web browser and entering the default IP address “192.168.0.20” in the address bar and press [Enter].

Note: Your computer must be in the same subnet as the storage server. If the subnet of the storage server is different than your computer, you cannot communicate with the device.

Enter the username and password and click the “Configuration” button to enter the SETUP page of the Web Configuration Utility. (Only the administration user “admin” is allowed to change or modify the configuration settings.)

The default login is: **admin** (*no password is required*).



User Name:

Password:

When logging into the storage server for the first time, you will be asked to choose a drive configuration and format the drives. There are four options: "Standard", "JBOD", "RAID 0" and "RAID 1".

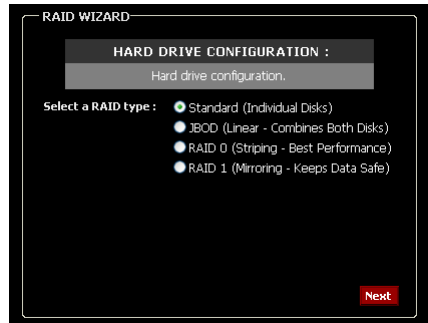
Standard = Each drive is an unique volume.

JBOD = Combines both drives in a linear fashion to create 1 volume.

RAID 0 = Provides data striping (Maximum performance).

RAID 1 = Provides data mirroring over both disks (Maximum backup security).

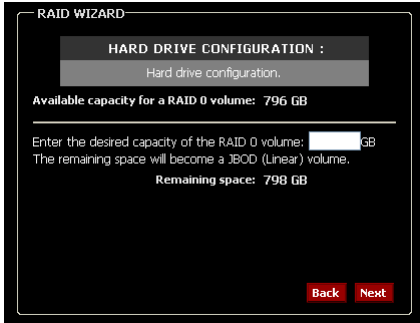
1. When prompted, configure the HDD settings by selecting "Standard", "JBOD", "RAID 0" or "RAID 1".



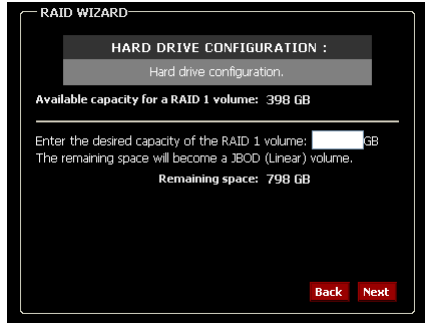
2. A warning message appears informing you that your drives will be formatted and all data erased. Click "OK" to continue.

Note: If you selected “RAID 0” or “RAID 1”, you need to assign the disk space which will be used for the RAID configuration.

RAID 0 = Stripe Configuration



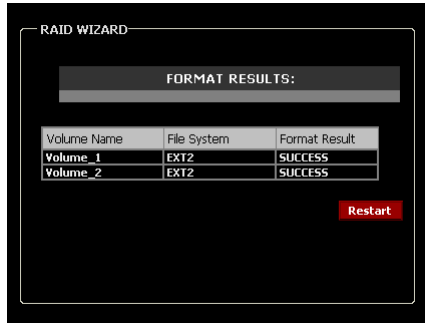
RAID 1 = Mirror Configuration



3. IMPORTANT!

The format of the Harddisk can take a while, depending on the chosen HDD configuration and the capacity of the Harddisk. Do **not** turn off or unplug the device during format!

You will be notified when the format is complete. Click “Restart” to restart the Storage Server. When the restart is complete, you can continue with the configuration of the Storage Server.



There is a menu bar at the top of the window, where contains six items that allow you to configure your storage server:



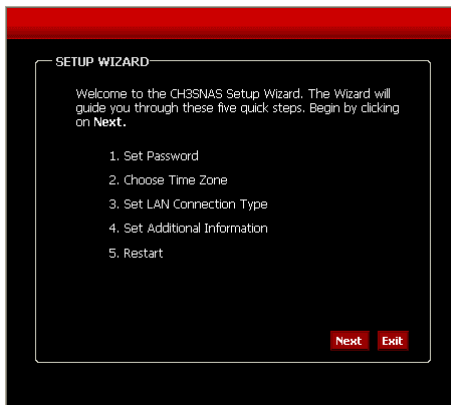
| Option | Description |
|----------|--|
| SETUP | Contains the storage server's setup wizard, the LAN configuration and device settings. |
| ADVANCED | Allows the storage server administrator to configure the users, groups of users and their storage quotas. The network access, FTP server, UPnP AV server, iTunes server and DHCP server settings are all contained here as well. |
| TOOLS | Contains the configuration options for the Admin account, the time and system settings, firmware and e-mail alerts. Disk utilities, power management options and RAID configuration options are also available from this page. |
| STATUS | Provides a summary of the storage information. |
| SUPPORT | Provides the help information for the storage server. |
| LOGOUT | Click to exit web configuration utility. |

Configuration - Setup

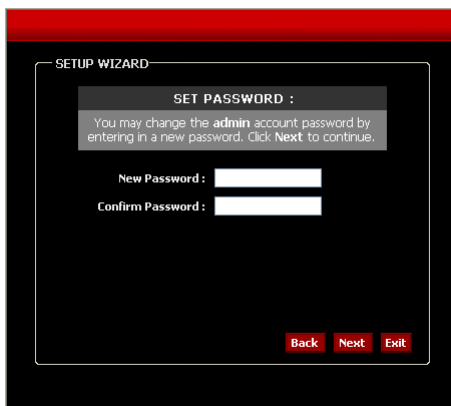
SETUP → WIZARD

The storage server provides a setup wizard that allows you to quickly configure some of the basic device settings.

1. Click the button “Run Wizard”.
2. The welcome screen lists five steps of the wizard. Click “Next” to continue.



3. You are recommended to set an admin password here. Enter the new password and re-enter it for confirmation.
4. When completed, click “Next”.



- For system management purpose, a correct time setting is critical to have accurate time stamps on the system logs. Set an appropriate Time Zone in this step.
- When completed, click "Next".

The screenshot shows a window titled "SETUP WIZARD" with a sub-header "CHOOSE TIME ZONE:". Below the sub-header is a grey box containing the text: "Select the appropriate time zone for your location and click Next to continue." Underneath this box is a dropdown menu showing "(GMT+01:00) Amsterdam, Berlin, Bern, Rome" with a blue arrow on the right. Below the dropdown is a label "Daylight Saving Time:" followed by a dropdown menu showing "EU". At the bottom right of the window are three red buttons: "Back", "Next", and "Exit".

- You can select the connection type and enter the LAN information, or keep the current settings.
- When completed, click "Next".

The screenshot shows a window titled "SETUP WIZARD" with a sub-header "SELECT LAN CONNECTION TYPE:". Below the sub-header is a grey box containing the text: "Select your connection type and fill out the IP information if necessary. Click Next to continue." Underneath this box are two radio buttons: "DHCP Client" (which is selected) and "Static IP". Below the radio buttons is a horizontal line. Under the line are five input fields: "IP Address:" with the value "192.168.0.20", "Subnet Mask:" with the value "255.255.255.0", "Gateway IP Address:" with the value "192.168.0.1", "DNS1:" (empty), and "DNS2:" (empty). At the bottom right of the window are three red buttons: "Back", "Next", and "Exit".

9. Enter a workgroup, name, and description for the storage server, or leave the default values.
10. When completed, click "Next".

SETUP WIZARD

Set Additional Information:

Enter your Workgroup, Name, and Description for the Conceptronic CH3SNAS if necessary. Otherwise you may accept the default values and click Next to continue.

Workgroup:

Name:

Description:

[Back](#) [Next](#) [Exit](#)

11. When completed, click "Restart" to restart the storage server and save the configuration, or click "Back" to go back the previous steps and change the settings.

SETUP WIZARD

SETUP COMPLETED:

The Setup Wizard is complete. Click **Back** to make any changes. Click **Restart** to save the current settings and restart the Conceptronic CH3SNAS.

[Back](#) [Restart](#) [Exit](#)

Note: After restarting, the login window will appear again. You can enter the Web Configuration Utility with your new administrator password.

SETUP → LAN

The Local Area Network settings for the storage server are configured on the LAN page.

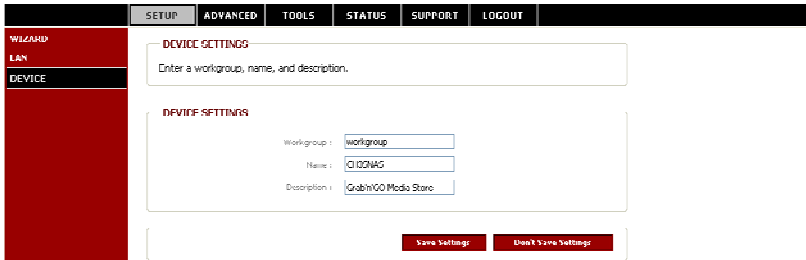
The screenshot shows a web interface for configuring LAN settings. At the top, there is a navigation bar with tabs: SETUP, ADVANCED, TOOLS, STATUS, SUPPORT, and LOGOUT. On the left side, there is a vertical menu with options: WIZARD, LAN, and DEVICE. The main content area is titled "LAN SETTINGS" and contains the following elements:

- A sub-header "LAN SETTINGS" followed by the instruction: "Select your connection type and fill out the IP information if necessary."
- A "Speed" field set to "1000 Mbps".
- A "Link Speed" section with radio buttons for "Auto" (selected), "100", and "1000", and an "Apply" button.
- A "Connection type" section with radio buttons for "DHCP Client" (selected) and "Static IP".
- Input fields for "IP Address" (192.168.0.20), "Subnet Mask" (255.255.255.0), "Gateway IP Address" (192.168.0.1), "DNS1" (192.168.0.1), and "DNS2" (empty).
- At the bottom, there are two buttons: "Save Settings" and "Don't Save Settings".

- **Link Speed:** The LAN speed is set to “Auto” by default, but can be manually set to 100 or 1000 Mbps.
- **Connection type:** Selecting “DHCP Client” will cause the storage server to obtain an IP address from the local DHCP server. Selecting “Static IP” requires the user to assign the IP information for the storage server manually.

SETUP → DEVICE

This page allows you to assign a workgroup, name and description to the storage server.



The screenshot shows a web interface with a navigation menu on the left containing 'WIZARD', 'LAN', and 'DEVICE'. The top navigation bar includes 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', 'SUPPORT', and 'LOGOUT'. The main content area is titled 'DEVICE SETTINGS' and contains a text input field with the placeholder 'Enter a workgroup, name, and description.' Below this is a form with three fields: 'Workgroup' (containing 'workgroup'), 'Name' (containing 'CH3SNAS'), and 'Description' (containing 'GubinGO Mode Store'). At the bottom right of the form are two buttons: 'Save Settings' and 'Don't Save Settings'.

- **Workgroup:** Assign a workgroup name to the storage server.
- **Name:** Assign a name to the storage server so that you can access the storage server through a web browser by entering the device name. For example, <http://CH3SNAS/>
- **Description:** Assign a unique description to the storage server.

Configuration - Advanced

ADVANCED → USERS

The storage server supports up to 64 users. The users can be specified by group or created individually. The created users are allowed to access the specific folders on the storage server via FTP or the local network.

The screenshot shows the 'USERS' configuration page. The sidebar on the left contains the following menu items: USERS, GROUPS, QUOTAS, NETWORK ACCESS, FTP SERVER, UPNP AV SERVER, iTunes SERVER, and DHCP SERVER. The main content area is titled 'USERS' and contains the following sections:

- USERS:** A section with the instruction "Create users and their passwords. Assign users to groups if desired."
- USER LIST:** A table with columns "No.", "User Name", and "Group Name". Above the table are links for "Change Password" and "Delete".
- CREATE A USER:** A form with the following fields:
 - Group: A dropdown menu currently set to "NONE".
 - User Name: A text input field.
 - Password: A text input field.
 - Confirm Password: A text input field.At the bottom right of the form are two buttons: "Apply Settings" and "Don't Save Settings".

- **Create a User:** This section contains required attributes for a new user, including group, user name and password. When completed, click “Apply” to activate the user’s account.
 - **Group:** Select an existing Group for the user to join.
 - **User Name:** Set a unique name for the user.
 - **Password:** Set a unique password for the user (must be longer than 5 char).
 - **Confirm Password:** Confirm the assigned password.
- **User List:** The users and their groups are displayed in this list.

Note: The storage server uses four pre-defined accounts in the firmware, which cannot be used as the users’ account names, including: **root**, **admin**, **ftp**, and **nobody**.

ADVANCED → GROUPS

The storage server supports up to 10 groups. To manage the storage server easily and efficiently, the users can be assigned to groups. You can set up the access rules and quotas for the organization.

The screenshot shows a web interface for managing groups. At the top, there is a navigation bar with tabs: SETUP, ADVANCED (selected), TOOLS, STATUS, SUPPORT, and LOGOUT. On the left side, there is a vertical menu with options: USERS, GROUPS (selected), QUOTAS, NETWORK ACCESS, FTP SERVER, UPnP AV SERVER, iTunes SERVER, and DHCP SERVER. The main content area is divided into three sections:

- GROUPS:** A text box with the instruction "Create new groups that users can be assigned to."
- GROUPS LIST:** A table with columns for "No.", "Group name", "User name", and "Del".
- CREATE A GROUP:** A form with the label "Add New Group:" followed by an input field and an "Add" button.

- **Create A Group:** Create a new group by assigning a unique name.
- **Groups List:** All created groups are displayed here.

ADVANCED → QUOTAS

The storage server supports the quota feature for both groups and individual users so that you can limit the amount of storage they are allocated. By default, users and groups do not have a quota.

The screenshot shows a web interface for configuring quotas. On the left is a red sidebar menu with options: AFPRA, GROUPS, QUOTAS (selected), NETWORK ACCESS, FTP SERVER, DDPMP AV SERVER, ITUNES SERVER, and DHEP SERVER. The main content area has a top navigation bar with tabs: SETUP, ADVANCED (selected), TOOLS, STATUS, SUPPORT, and LOGOUT. Below the navigation, there are three main sections:

- QUOTAS SETTINGS:** A text box containing the instruction "Assign hard drive space quotas for users or groups."
- USER QUOTA SETTINGS:** A table with columns: No., User Name, Volume_1 (Used, Limit), Volume_2 (Used, Limit), and Edit.
- GROUP QUOTA SETTINGS:** A table with columns: No., Group Name, Volume_1 (Used, Limit), Volume_2 (Used, Limit), and Edit.

On the right side, there is a **QUOTA STATUS** box showing the current status as "Stopped" and a red "Start" button.

- **User Quota Settings:** User quotas are displayed here. Quotas can be edited by clicking the “Edit” icon.
- **Group Quota Settings:** Group quotas are displayed here. Quotas can be edited by clicking the “Edit” icon.
- **Quota Status:** The current status of the quota feature is displayed here. Click “Start” to enable the quota function.

ADVANCED → NETWORK ACCESS

This page allows you to assign users and groups to specific folders or volumes. By default, all users are allowed Read/Write access to all volumes. Before specific user or group rules can be created, the default rules must be deleted.

The screenshot shows a software interface with a sidebar on the left containing menu items: USERS, GROUPS, QUOTAS, NETWORK ACCESS (highlighted), FTP SERVER, UPnP AV SERVER, iTunes SERVER, and DHCP SERVER. The main content area is titled 'NETWORK ACCESS' and contains three sections:

- NETWORK ACCESS SETTINGS:** A text box with the instruction: "Assign permissions for users and groups on the local network."
- NETWORK ACCESS LIST:** A table with columns: Share, Path, User/Group, Comment, R/W, and icons. It lists two entries: Volume_1 and Volume_2, both with 'ALL' permissions and 'Read/Write' access.
- NETWORK ACCESS SETTINGS:** A form for configuring a new rule. It includes:
 - Category: Radio buttons for 'User' (selected) and 'Group'.
 - User: A dropdown menu with 'Please select a user' and a checkbox for 'All admin's'.
 - Folder: A text input field with a 'Browse' button.
 - Permission: A dropdown menu with 'Read Only' selected.
 - Comment: A text input field.

At the bottom of the settings section are two buttons: 'Save Settings' and 'Don't Save Settings'.

- **Network Access Settings:** Assign permissions for the users and groups on the local network here.
 - **Category:** Select "Group" or "User" to decide the access rule.
 - **Group/User:** Select the group or user the access rule will apply to.
 - **Folder:** Click "Browse" to select the folder or directory.
 - **Permission:** Set the user or group permission to "Read Only" or "Read/Write".
 - **Comment:** Enter a comment for reference or description of the rule.
- **Network Access List:** Lists all defined access rules.

! Windows Vista Network Note !

The security policies which are being used by Windows Vista are not supported by the Samba software in the CH3SNAS.

Therefore, to use file shares/folders of the CH3SNAS, you need to change this the security policies of Windows Vista.

Changing the security settings.

1. Click "Start" -> "All Programs" -> "Accessories" -> "Run".
2. Type "secpol.msc" and click "OK".
3. Allow Windows to open the Security Policies window by clicking "Continue".
4. Click "Local Policies" and choose "Security options".
5. Right click on "Network security: LAN Manager authentication level" and select "Properties".
6. Change the value "Sent NTLMv2 response only" to "Send LM&NTLM - use NTLMv2 session security if negotiated".
7. Click "Apply" and "OK" and close the Security Policies screen.
8. Reboot your computer.

You can now map a network drive to your computer with the steps below:

1. Right click on "Computer" and select "Map network drive...".
2. Select the drive letter you want to use (for example "Z:").
3. Type the folder which you want to map (for example "[\\CH3SNAS\Volume_1](#)").
4. Click "Different user name" and type the username "Guest" (or another username) and the password which is configured for the CH3SNAS share.
5. Click "OK" and Click "Finish".

Your CH3SNAS share is now mapped to a driveletter on your computer.

ADVANCED → FTP SERVER

The storage server is equipped with a built in and user-friendly FTP server, which allows the users to access the important data whether they are on the local network or at a remote location. In addition, the FTP server can be configured to allow up to 10 users to access the specific directories simultaneously on the storage server.

The screenshot displays the 'FTP SERVER' configuration page. The left sidebar lists navigation options: USERS, SERVICES, QUINTAS, NETWORK ACCESS, FTP SERVER (highlighted), FTP/AV SERVER, iTunes SERVER, and DMED SERVER. The main content area is titled 'FTP SERVER SETTINGS' and includes a sub-section 'FTP SERVER SETTINGS' with the instruction: 'Assign permissions for users and groups who will be accessing the FTP server from over the Internet.' Below this is the 'FTP ACCESS LIST' section, which features a table with columns for Path, permissions (Read/Write, Read Only, Modify Setting, Delete), and User/Group. The 'FTP SERVER SETTINGS' section contains fields for Category (User/Group), User (Please select a user), Folder (root), Permission (Read Only), Max User (05), Idle Time (2 minutes), Port (21), and Flow Control (Unlimited). A 'Start FTP Server' button is located in the 'FTP SERVER STATUS' panel on the right.

- **FTP Server Settings:** This section contains the settings for the storage server’s FTP Server feature. When completed, click **“Apply”** to save the settings.
 - **Category:** Select **“Group”** or **“User”** to decide the FTP server rule.
 - **Group/User:** Select the group or user the FTP server rule will apply to.
 - **Folder:** Click **“Browse”** to select the folder or directory, or select **“root”** to grant access to all volumes.
 - **Permission:** Set the user or group permission to **“Read Only”** or **“Read/Write”**.
When completed, click **“Add”** to add the user or group FTP rule.
 - **Max User:** Set the maximum amount of users that can connect to the FTP server.
 - **Idle Time:** Set the amount of time a user can remain idle before being disconnected.
 - **Port:** Set the FTP port. Default is 21.

- **Flow Control Path:** Allow you to limit the amount of bandwidth available for each user.
- **FTP Access List:** Lists all defined FTP Rules.
- **FTP Server Status:** The current settings and status of the storage server's FTP Server are displayed here.

ADVANCED → UPNP AV SERVER

The storage server features an UPnP AV Server. It provides the ability to stream photos, music and videos to UPnP AV compatible network media players. If the function is enabled, the storage server will be automatically detected by the UPnP AV compatible media players on your local network.



- **UPnP AV Server:** Select “Enable” or “Disable” for the function.
- **Folder:** Specify the folder or directory that will be shared by the UPnP AV server. Select “root” to share the entire volume.
- **Auto Refresh:** Specify the Auto Refresh time. The CH3SNAS will automatically refresh the Media Content if this option is selected and configured.

When completed, click “Save Settings” to save the settings. Click “Refresh” after adding new files to be used by UPnP AV compatible devices.

Note: The CH3SNAS supports ‘m3u’ play-list files, but with a limit of 256 songs per play-list. If an ‘m3u’ play-list contains more than 256 songs, only the first 256 songs will be indexed and can be used by an UPnP AV Client.

ADVANCED → ITUNES SERVER

The storage server features an iTunes Server. It provides the ability to share music to the computer on the local network running iTunes. If the function is enabled, the storage server will be automatically detected in the iTunes program and the music and videos contained in the specified directory will be available to stream over the network.

The screenshot shows a web interface with a dark red sidebar on the left containing menu items: USERS, GROUPS, QUOTAS, NETWORK ACCESS, FTP SERVER, UPNP AV SERVER, ITUNES SERVER (highlighted), and DHCP SERVER. The main content area has a top navigation bar with tabs: SETUP, ADVANCED (selected), TOOLS, STATUS, SUPPORT, and LOGOUT. Below the tabs, there are two sections for 'iTunes SERVER SETTINGS'. The first section contains the text: 'Configure iTunes server settings for streaming music directly to iTunes software.' The second section contains the following configuration options: 'iTunes Server:' with radio buttons for 'Enable' (selected) and 'Disable'; 'Folder:' with a dropdown menu showing 'root' (selected); and 'Password:' with a text input field containing 'iTUNES_SHARP'. At the bottom of the settings area are three buttons: 'Save Settings', 'Don't Save Settings', and 'Refresh'.

- **iTunes Server:** Select “Enable” or “Disable” for the function.
- **Folder:** Specify the folder or directory that will be shared by the iTunes server. Select “root” to share the entire volume.
- **Password:** Set the password for the iTunes server.

When completed, click “Save Settings” to save the settings. Click “Refresh” after adding new files to be used with iTunes.

After enabling the iTunes server on the storage server, launch iTunes. When iTunes detects the storage server, select it and you will be prompted to enter the iTunes server password if a password is being set.

ADVANCED → DHCP SERVER

The storage server can be used as a DHCP Server. As a DHCP server, it can be used to serve IP addresses to devices on your local network. However, this feature should not be enabled if you already have a DHCP server, such as a router on your local network.

SETUP **ADVANCED** TOOLS STATUS SUPPORT LOGOUT

USERS
GROUPS
QUOTAS
NETWORK ACCESS
FTP SERVER
IIPUP AY SERVER
iTunes SERVER
DHCP SERVER

DHCP SERVER SETTINGS
Enable the DHCP server to distribute IP addresses on the network.

DHCP CLIENT LIST

| Hostname | IP Address | MAC Address | Expired Time |
|----------|------------|-------------|--------------|
|----------|------------|-------------|--------------|

DHCP SERVER

DHCP Server: Enabled Disabled

Starting IP Address:

Ending IP Address:

Lease Time:

Save Settings **Don't Save Settings** **Refresh**

- **DHCP Server:** Select “Enable” or “Disable” for the function.
 - **Starting IP Address:** Enter the starting IP address for the range of addresses assigned by the DHCP server.
 - **Ending IP Address:** Enter the ending IP address for the range of addresses assigned by the DHCP server.
 - **Lease Time:** Set the duration of time that an IP address will remain assigned to a device.
- **DHCP Client List:** Lists all DHCP Client here. Click “Refresh” to reload the updated list.

Configuration - Tools

TOOLS → ADMIN

This page allows you to set a password for the admin account. It is recommended to set an administrator password when first configuring the storage server.

The screenshot shows a web interface with a navigation menu on the left and a main content area. The navigation menu includes: ADMIN PASSWORD (highlighted), TIME, SYSTEM, FIRMWARE, E-MAIL ALERTS, PRIMER MANAGEMENT, and RAID. The main content area has a top navigation bar with: SETUP, ADVANCED, TOOLS (highlighted), STATUS, SUPPORT, and LOGOUT. Below this, the 'ADMINISTRATOR SETTINGS' section contains the instruction 'Get the administrator's password.' and an 'ADMINISTRATOR' section with four input fields: 'User Name' (pre-filled with 'admin'), 'Password', 'New Password', and 'Confirm Password'. At the bottom of the form are two buttons: 'Save Settings' and 'Print Screen Settings'.

- **User Name:** The administrator user name is `admin`, and this cannot be changed.
- **Password:** Enter the current password.
- **New Password:** Enter the new password.
- **Confirm Password:** Enter the new password again for confirmation.

When completed, click “Save Settings” to save the settings.

TOOLS → TIME

This page contains several different options for setting the storage server's internal clock. It is important that accurate time is set so that scheduled backups and downloads will be accurate.

ADMIN PASSWORD

TIME

SYSTEM

FIRMWARE

E-MAIL ALERTS

POWER MANAGEMENT

RAID

SETUP ADVANCED **TOOLS** STATUS SUPPORT LOGOUT

SYSTEM TIME SETTINGS

Set the system time by synchronizing with NTP, synchronizing with your computer, or manually entering it.

Time: 14:23:04 Date: 02/27/07

NTP SERVER

NTP Server : 194.109.84.200

Time Zone : (GMT+01:00) Amsterdam, Berlin, Bonn, Rome

FROM MY COMPUTER

Set time from my computer.

GET THE DATE AND TIME MANUALLY

Month | 02 | Day | 27 | Year | 2007 |

Hour | 14 | Minute | 22 | Second | 47 |

DAYLIGHT SAVING TIME

Daylight Saving Time : None

- **NTP Server:** Network Time Protocol (NTP) synchronizes your storage server with an Internet time server. Enter the IP Address or domain name of the time server you want to sync the storage server and click Set Time.
- **From My Computer:** Click "Set Time" to sync your storage server's clock with the computer being used to configure it.
- **Set The Date And Time Manually:** This option allows you to set the time and date manually. Enter the appropriate time and date and click "Set Time".
- **Daylight Saving Time:** Available Daylight Saving Time options are "None", "USA" or "EU" (Europe). Select the appropriate option and click "Set Time".

- **Idle Time:** Enter the time (in minutes) that the administrator will be allowed to remain idle while accessing the storage server configuration settings or that users will be allowed to remain idle while accessing the download schedule settings.

TOOLS → FIRMWARE

This page allows you to check for new firmware releases and upload them to the storage server.

The screenshot displays a web-based configuration interface for a storage server. At the top, a navigation bar includes tabs for SETUP, ADVANCED, TOOLS (selected), STATUS, SUPPORT, and LOGOUT. On the left, a vertical sidebar lists menu items: ADMIN PASSWORD, TIME, SYSTEM, FIRMWARE (highlighted), E-MAIL ALERTS, POWER MANAGEMENT, and RAID. The main content area is divided into two sections. The upper section, titled 'FIRMWARE UPGRADE', contains instructions: 'To upgrade the firmware, locate the upgrade file on the local hard drive with the Browse button. Once you have found the file to be used, click the Apply button below to start the firmware upgrade.' The lower section, titled 'CURRENT FIRMWARE INFO', shows the current hardware version as 'L00' and the firmware date as '02/11/2007'. Below this information is a text input field for the file path, followed by a 'Browse...' button. At the bottom right of the main content area, there are two buttons: 'Apply' and 'Cancel'.

- **Current Firmware Info:** This section shows the information about the current firmware version of the storage server. To upgrade the firmware, click “Browse” to select the new firmware file on your local computer and then click “Apply” to begin the firmware upgrade process.

TOOLS → E-MAIL ALERTS

With the E-Mail Alerts feature, you can configure e-mails to be sent alerting you to certain operational conditions and drive status conditions. These alerts can prove helpful with the management and safeguarding of important data.

E-MAIL ALERTS

E-mail yourself alerts for certain conditions or for drive space status updates.

E-MAIL ALERT SETTINGS

Login Method: Account Anonymous

User Name:

Password:

SMTP Server:

Sender E-mail:

Receiver E-mail:

Test E-Mail

ALERT TYPES

Space Status: Interval: 0 (hours) 0 (Minutes)

A Volume Is Full

A Hard Drive Has Failed

The Administrator's Password Has Been Changed

Firmware Has Been Upgraded

System Temperature Has Exceeded (Celsius/Fahrenheit) 140 °F

Enabling this feature will cause the BIOS/AC to shut down after the selected temperature is exceeded and an e-mail is sent.

Save Settings **Don't Save Settings** **Clear Saved Settings**

- **E-mail Alert Settings:** This section contains the settings for the outgoing e-mail account and the receiving e-mail account. Once configured, use the “Test E-Mail” button to send a test e-mail and confirm your settings are correct.
- **Login Method:** Select “Account” or “Anonymous”. Choosing “Anonymous” does not require a user name and password.
- **User Name:** Enter the user name for your e-mail account.
- **Password:** Enter the password for your e-mail account.
- **SMTP Server:** Enter the IP address or domain name of your outgoing mail server. If you are unsure of this value, contact your e-mail provider.
- **Sender E-Mail:** Enter the e-mail address of the user who will send the e-mail.
- **Receiver E-Mail:** Enter the e-mail address you want to send the alerts to. This address must correspond with the SMTP server configured above.

- **Alert Types:** This section contains the alert options and their configuration settings.
 - **Space Status:** Select an interval in hours and minutes to have a status of space remaining on the drives e-mailed.
 - **Hard Drive Is Full:** An alert will be sent when the hard drive is full.
 - **A Critical Error Has Occurred:** An alert will be sent if the defined drive fail of critical error occur happened.
 - **The Administrator's Password Has Been Changed:** An alert will be sent if the admin password is changed.
 - **Firmware Has Been Upgraded:** An alert will be sent if the firmware is upgraded.
 - **System Temperature Has Exceeded:** An alert will be sent if the storage server device temperature exceeds the set threshold.

TOOLS → POWER MANAGEMENT

The storage server's Power Management feature allows you to configure the drives to shut down while power remains constant to the device. The drives will power up again when data is accessed.

| STEP | ADVANCED | TOOLS | STATUS | SUPPORT | LOGOUT |
|-------------------------|----------|-------|--------|---------|--------|
| ADMIN PASSWORD | | | | | |
| TIME | | | | | |
| SYSTEM | | | | | |
| FIRMWARE | | | | | |
| E-MAIL ALERTS | | | | | |
| POWER MANAGEMENT | | | | | |
| RAID | | | | | |

POWER MANAGEMENT SETTINGS

Enabling this feature will cause the hard drives to hibernate after the specified time of inactivity. They will wake-up when new activity is detected.

POWER MANAGEMENT SETTINGS

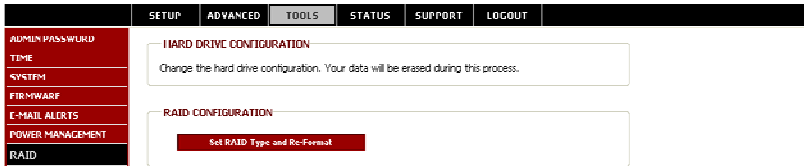
Power Management: Enable Disable

Turn Off Hard Drives:

- **Power Management:** Select "Enable" or "Disable" for this function on the storage server.
- **Turn off hard drives:** Set the amount of time before idle drives will shut down.

When completed, click "Apply" to save the settings.

TOOLS → RAID



- **RAID Configuration:** Click “Set RAID Type and Re-Format” to change the current drive configuration. All data will be lost when changing the drive configuration.

The storage server supports four different disk configuration types: Standard, JBOD, RAID 0 and RAID 1.

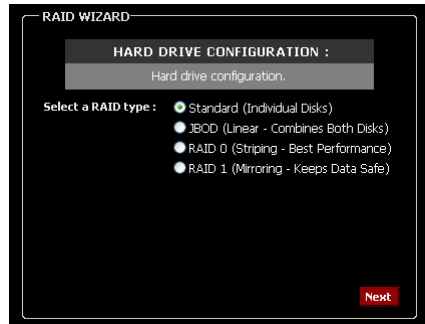
Standard = Each drive is an unique volume.

JBOD = Combines both drivers in a linear fashion to create 1 volume.

RAID 0 = Provides data striping (Maximum performance).

RAID 1 = Provides data mirroring over both disks (Maximum backup security).

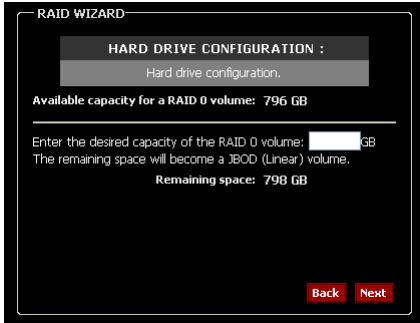
1. When prompted, configure the HDD settings by selecting “Standard”, “JBOD”, “RAID 0” or “RAID 1”.



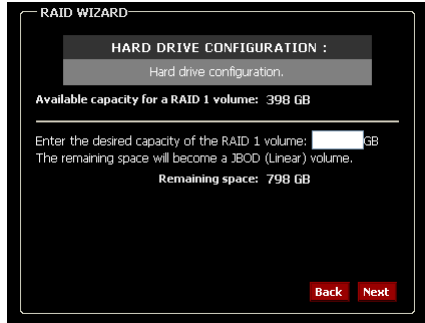
2. A warning message appears informing you that your drives will be formatted and all data erased. Click “OK” to continue.

Note: If you selected "RAID 0" or "RAID 1", you need to assign the disk space which will be used for the RAID configuration.

RAID 0 = Stripe Configuration



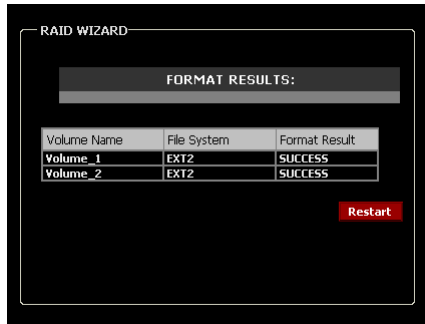
RAID 1 = Mirror Configuration



3. IMPORTANT

The format of the Harddisk can take a while, depending on the chosen HDD configuration and the capacity of the Harddisk. Do not turn off or unplug the device during format!

You will be notified when the format is complete. Click "Restart" to restart the Storage Server. When the restart is complete, you can continue with the configuration of the Storage Server.



Configuration - Status

STATUS → DEVICE INFO

This page displays the general information of the storage server.

DEVICE INFORMATION
View a summary of device information here.

LAN INFO

| | |
|---------------------|-------------------|
| IP Address: | 192.168.11.20 |
| Subnet Mask: | 255.255.255.0 |
| Gateway IP Address: | 192.168.0.1 |
| Mac Address: | 00:50:5A:93:23:15 |

DEVICE INFO

| | |
|---------------------|---------------------------|
| Workgroup: | workgroup |
| Name: | CHESNAS |
| Description: | Intel(R) Merlot Processor |
| System Temperature: | 111 F / 44 C |

PRINTER INFO

| | |
|---------------|------|
| Manufacturer: | None |
| Product: | None |

HARD DRIVE INFO


| | |
|----------------------------|-----------|
| Volume Name: | Volume_1 |
| Total Hard Drive Capacity: | 393061 MB |
| Used Space: | 74 KIB |
| Unused Space: | 393061 MB |

| | |
|----------------------------|-----------|
| Volume Name: | Volume_2 |
| Total Hard Drive Capacity: | 303061 MB |
| Used Space: | 24 KB |
| Unused Space: | 303061 MB |

- **LAN Info:** Displays the local network settings of the storage server.
- **Device Info:** Displays the workgroup, device name, device description and current temperature of the storage server.
- **Printer Info:** Displays information for a connected USB printer.
- **Hard Drive Info:** Displays the hard disk drive(s) information.

Configuration - Support

This page provides a menu of Support topics explaining the features of the storage server. Click on the desired link to display the related online instruction.



| SETUP | ADVANCED | TOOLS | STATUS | SUPPORT | LOGOUT |
|-------|----------|-------|--------|---------|--------|
|-------|----------|-------|--------|---------|--------|

Support

Get your help here...

Support Menu

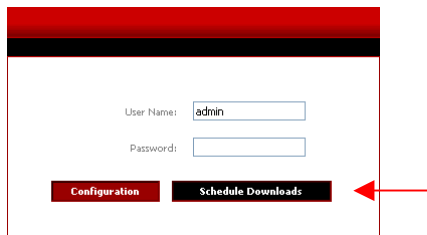
| | |
|--|---|
| Setup | Tools |
| <ul style="list-style-type: none">▪ Wizard▪ Lan▪ Device | <ul style="list-style-type: none">▪ Admin Password▪ Time▪ System▪ Firmware▪ E-Mail Alerts▪ Howto Management▪ RAID |
| Advanced | |
| <ul style="list-style-type: none">▪ Users▪ Groups▪ Quotas▪ Network Access▪ FTP server▪ UPnP AV Server▪ iTunes Server▪ DHCP Server | |

4. Downloading files

Entering Download Scheduler

1. If you are in the configuration mode, click “LOGOUT” to exit the web configuration utility, and re-login the utility’s download page by clicking the “Schedule Downloads” button on the login dialog box.

If you are not logged in, click the “Connect to webpage” button on the Easy Search control panel or open the web browser and enter the default IP address “192.168.0.20” in the address bar and press [Enter].



The screenshot shows a login dialog box with a white background and a red border. At the top, there is a red bar. Below it, there are two input fields: "User Name:" with "admin" entered, and "Password:". At the bottom, there are two buttons: "Configuration" (red) and "Schedule Downloads" (black). A red arrow points to the "Schedule Downloads" button.

Enter the username and password and click the “Schedule Downloads” button to enter the Download Scheduler of the CH3SNAS.

The default login is: **admin** (*no password is required*).

Note: If the administrator has added users to the Storage Server configuration, the users can login to the Download Scheduler with their username and password.

2. The Main menu of Download page will display as below. There is a menu bar at the top of the window, where contains four items that allow you to configure your download task.



| Option | Description |
|------------|--|
| SCHEDULING | Click to set up your download schedule. |
| STATUS | Provides the information of the download status. |
| SUPPORT | Provides the online help for the storage server. |
| LOGOUT | Click to exit the download page. |

Download - Scheduling

Click the SCHEDULING menu to set up your download tasks. Enter the required information in the relative fields.

SCHEDULING SETTINGS

Schedule downloads of files and folders from an FTP server, web server, or local network share.

SCHEDULING SETTINGS

Login Method: Account Anonymous

User Name:

Password:

Type:

URL:

Save To:

When: Date: / / Time: :

Recurring Backup: incremental backup (Only for local backup)

SCHEDULE LIST

| Status | Download Path | Save To | Time | Del |
|--------|---------------|---------|------|-----|
|--------|---------------|---------|------|-----|

- **Scheduling Settings:** Configure download and backup schedules here.
 - **Login Method:** According to the settings of target server, choose “Account” or “Anonymous”. When you choose “Account”, you have to enter the correct user name and password.
 - **Type:** Select “File” or “Folder”, depending on what you want to download or backup.
 - **URL:** Enter the URL address of target server. Click “Test” to test the connection. Click “Local” to set the source file or folder from one of the internal drive volumes.
 - **Save to:** Click **Browse** to locate the file or folder, and then click **OK** to accept the network path.
 - **When:** You have to set up the start-up time to download files from the pull-down menu of the “Date” and “Time” options.

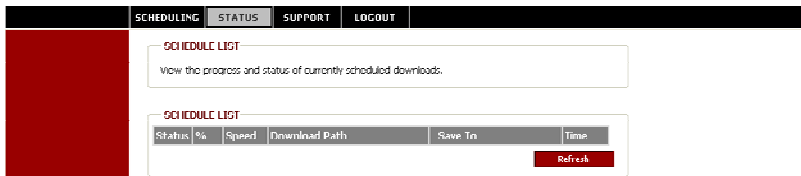
- **Recurring Backup:** Designate the interval and time you want the backup or download to run unattended.

By default, all local backups and file/folder downloads are in Overwrite mode, meaning that identical files in the destination folder will be overwritten by the source files. Checking “Incremental Backup” will have the storage server compare identical file names at the source and destination. Files will only be overwritten if the source file is more recent.

- **Schedule List:** This section displays all completed, active and pending scheduled downloads and backups.

Download - Status

Click the **STATUS** menu to display the status of the scheduled download tasks. Click “Refresh” to reload the status of these tasks.



SCHEDULE LIST

View the progress and status of currently scheduled downloads.

SCHEDULE LIST

| Status | % | Speed | Download Path | Size To | Time |
|--------|---|-------|---------------|---------|------|
|--------|---|-------|---------------|---------|------|

Refresh

Download - Support

This page provides a menu of Support topics explaining the features of the Download Schedule function. Click on the desired link to display the related online instruction.

| SCHEDULING | STATUS | SUPPORT | LOGOUT |
|---|--|---------|--------|
|  | Support Get your help here... | | |
| | Support menu Scheduler <ul style="list-style-type: none">Scheduler settingsSchedule list | | |

5. Product Specifications

Standards

- IEEE 802.3, 802.3u, 802.3z
- SATA I, II
- DDR1
- UPnP AV 1.0
- DLNA HNv1

Connecting Ports

- One Giga (10/100/1000M) RJ-45 connector (with Auto-MDIX)
- One USB print server port
- One Power connector

Buttons

- One Power button
- One Reset button

Management

- Web-based administrative program
- Easy Search utility

LEDs

- Power (Blue)
- LAN (Blue)
- HDD1/2 (Blue; Orange for HDD failed)

Network Service Protocols

- TCP/IP
- DHCP
- SMB
- SMTP
- HTTP/S
- NTP
- FTP

Operating System Support

- Windows 2000/XP/Vista
- Linux

Environmental and Physical

- Power Supply: 12V/3A, 5V/3A
- Operating Temperature: 0°C to 40°C
- Storage Temperature: -20°C to 50°C
- Humidity: 5 to 90% maximum, non-condensing

EMI Compliance

- FCC Part 15 Class B
- IC
- CE, LVD
- C-tick

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Please see The GNU General Public License for the exact terms and conditions of this license.

Specially, the following parts of this product are subject to the GNU GPL:

| | | |
|----------------------------------|--------------------------------|----------------------|
| 1. Linux kernel 2.6.12.6 | 11. zlib-1.2.2 | 21. samba-2.2.8a |
| 2. uclibc-toolchain-src-20040609 | 12. libid3tag-0.15.1b | 22. tinylogin-1.4 |
| 3. at-3.1.8 | 13. gdbm-1.8.3 | 23. u-boot-1.7.3 |
| 4. busybox-1.00-pre1 | 14. mt-daapd-0.2.4 | 24. util-linux-2.12r |
| 5. confuse | 15. LPRng-3.8.10 | 25. wget-LFS |
| 6. dosfstools-2.10 | 16. mdadm-2.2 | 26. wu-ftpd-2.6.2 |
| 7. e2fsprogs-1.32 | 17. module-init-tools-3.3-pre1 | 27. jpegsrc6 |
| 8. goahead | 18. ntp-4.2.0 | 28. libiconv-1.9.2 |
| 9. imgconvert | 19. openssl-0.7.i | 29. sqlite-3.3.7 |
| 10. mac-fdisk-0.1.org | 20. quota-tools | |

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Conceptronic has exposed the full source code of the GPL licensed software, including any scripts to control compilation and installation of the object code. All future firmware updates will also be accompanied with their respective source code. For more information on how you can obtain our open source code, please visit our web site.

Version 2, June 1991

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, 1 April 1989
Ty Coon, President of Vice

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