

ALLNET ALL6800

User's Manual

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About This Manual

All information in this manual has been carefully verified to ensure its correctness. In case of an error, please provide us with your feedback. ALLNET GmbH reserves the right to modify the contents of this manual without notice.

Product name: ALLNET ALL6800

Manual Version: 1.0

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Limited Warranty

ALLNET GmbH guarantees all components of ALLNET ALL6800 are thoroughly tested before they leave the factory and should function normally under general usage. In case of any system malfunctions, ALLNET GmbH and its local representatives and dealers are responsible for repair without cost to the customer if the product fails within the warranty period and under normal usage. ALLNET GmbH is not responsible for any damage or loss of data deemed to be caused by its products. It is highly recommended that users conduct necessary back-up practices.

Safety Warnings

For your safety, please read and follow the following safety warnings:

- Read this manual thoroughly before attempting to set up your ALL6800.
- Your ALL6800 is a complicated electronic device. DO NOT attempt to repair it under any circumstances. In the case of malfunction, turn off the power immediately and have it repaired at a qualified service center. Contact your vendor for details.
- DO NOT allow anything to rest on the power cord and DO NOT place the power cord in an area where it can be stepped on. Carefully place connecting cables to avoid stepping or tripping on them.
- Your ALL6800 can operate normally under temperatures between 0°C and 40°C, with relative humidity of 20% 85%. Using the ALL6800 under extreme environmental conditions could damage the unit.
- Ensure that the ALL6800 is provided with the correct supply voltage (AC 100V ~ 240V, 50/60 Hz, 3A). Plugging the ALL6800 to an incorrect power source could damage the unit.
- Do NOT expose the ALL6800 to dampness, dust, or corrosive liquids.
- ▲ Do NOT place the ALL6800 on any uneven surfaces.
- DO NOT place the ALL6800 in direct sunlight or expose it to other heat sources.
- ▲ DO NOT use chemicals or aerosols to clean the ALL6800. Unplug the power cord and all connected cables before cleaning.
- DO NOT place any objects on the ALL6800 or obstruct its ventilation slots to avoid overheating the unit.
- Keep packaging out of the reach of children.
- If disposing of the device, please follow your local regulations for the safe disposal of electronic products to protect the environment.

Table of Contents

Copyright and Trademark Notice	. 2
About This Manual	. 2
Limited Warranty	. 2
Safety Warnings	. 3
Table of Contents	
Chapter 1: Introduction	. 8
Overview	
Product Highlights	
File Server	
FTP Server	
Backup Server	8
Printer Server	
Multiple RAID	9
Dual Mode Support	9
Superior Power Management	9
Package Contents	. 9
Front Panel	10
Hard Disk Trays	
Rear Panel	
Chapter 2: Hardware Installation	13
Overview	
Before You Begin	13
Hard Disk Installation	13
Cable Connections	
Checking System Status	15
System Status Normal	15
System Trouble	
Chapter 3: First Time Setup	16
Overview	16
ALLNET Setup Wizard	
LCD Operation	
LCD Controls	
Display Mode	
USB Copy	
Management Mode	
Typical Setup Procedure	
Step 1: Network Setup	
Step 2: RAID Creation	
Step 3: Create Local Users or Setup Authentication	
Step 4: Create Folders and Set Up ACLs	
Step 5: Start Services	
Chapter 4: System Management	
Overview	
Web Administration Interface	
Menu Bar	
Language Selection	
Status Menu	
Product Information	
System/Service Status	
System Information Printer Status	
	25 25

Wake-Up On Lan (WOL)	
Power Management	26
Storage Management	27
Disks Information	27
S.M.A.R.T. Information	
RAID Information	29
RAID Configuration	29
RAID Level	
RAID Configuration	
Creating a RAID	
Expanding a RAID	
Migrating a RAID	32
Deleting a RAID	33
Space Allocation	33
Allocating Space for iSCSI Volume	33
Stackable NAS	35
Snapshot	35
Folder Management	
Adding Folders	
Editing Folders	
Deleting Folders	
NFS Share	
Snap (Snapshot configuration)	38
Folder Access Control List (ACL)	40
File System Check	41
Advance Option	43
File Access Cache	43
Samba Recycle Bin	
Samba Anonymous Login Authentication	44
iSCSI Block Size	44
iSCSI CRC/Checksum	45
Network Management	
	45
Network Management	45
Network Management WAN Configuration LAN Configuration	45 45
Network Management WAN Configuration LAN Configuration DHCP Configuration	45 45 46
Network Management WAN Configuration LAN Configuration DHCP Configuration Web Services Configuration	45 46 47
Network Management WAN Configuration LAN Configuration DHCP Configuration Web Services Configuration AFP (Apple Network Setup)	45 46 47 47
Network Management WAN Configuration LAN Configuration DHCP Configuration Web Services Configuration AFP (Apple Network Setup) NFS Setup	45 46 47 47 48
Network Management WAN Configuration LAN Configuration DHCP Configuration Web Services Configuration AFP (Apple Network Setup) NFS Setup User and Group Management	45 46 47 48 48
Network Management WAN Configuration LAN Configuration DHCP Configuration Web Services Configuration AFP (Apple Network Setup) NFS Setup User and Group Management Local User Configuration	45 46 47 48 48 48
Network Management WAN Configuration LAN Configuration DHCP Configuration Web Services Configuration AFP (Apple Network Setup) NFS Setup User and Group Management Local User Configuration Adding Users	45 46 47 48 48 48 49
Network Management WAN Configuration LAN Configuration DHCP Configuration Web Services Configuration AFP (Apple Network Setup) NFS Setup User and Group Management Local User Configuration Adding Users Modifying Users	45 46 47 48 48 48 49 50
Network Management WAN Configuration LAN Configuration DHCP Configuration Web Services Configuration AFP (Apple Network Setup) NFS Setup User and Group Management Local User Configuration Adding Users Modifying Users Deleting Users	45 46 47 48 48 48 49 50
Network Management WAN Configuration LAN Configuration DHCP Configuration Web Services Configuration AFP (Apple Network Setup) NFS Setup User and Group Management Local User Configuration Adding Users Modifying Users Deleting Users Local Groups Configuration	45 46 47 48 48 49 49 50
Network Management WAN Configuration LAN Configuration DHCP Configuration Web Services Configuration AFP (Apple Network Setup) NFS Setup User and Group Management Local User Configuration Adding Users Modifying Users Deleting Users Local Groups Configuration Adding Groups	45 46 47 48 48 49 50 50
Network Management WAN Configuration LAN Configuration DHCP Configuration Web Services Configuration AFP (Apple Network Setup) NFS Setup User and Group Management Local User Configuration Adding Users Modifying Users Deleting Users Local Groups Configuration Adding Groups Modifying Groups	45 46 47 48 48 49 50 50
Network Management WAN Configuration LAN Configuration DHCP Configuration Web Services Configuration AFP (Apple Network Setup) NFS Setup User and Group Management Local User Configuration Adding Users Modifying Users Deleting Users Local Groups Configuration Adding Groups Modifying Groups Deleting Groups	45 46 47 48 48 49 50 50 50
Network Management WAN Configuration LAN Configuration DHCP Configuration Web Services Configuration AFP (Apple Network Setup) NFS Setup User and Group Management Local User Configuration Adding Users Modifying Users Deleting Users Local Groups Configuration Adding Groups Modifying Groups Deleting Groups Batch User and Group Creation	45 46 47 48 48 49 50 50 50
Network Management WAN Configuration LAN Configuration DHCP Configuration Web Services Configuration AFP (Apple Network Setup) NFS Setup User and Group Management Local User Configuration Adding Users Modifying Users Deleting Users Local Groups Configuration Adding Groups Modifying Groups Deleting Groups Batch User and Group Creation ADS/NT Configuration	45 46 47 48 48 49 50 50 51 51
Network Management WAN Configuration LAN Configuration DHCP Configuration Web Services Configuration AFP (Apple Network Setup) NFS Setup User and Group Management Local User Configuration Adding Users Modifying Users Deleting Users Local Groups Configuration Adding Groups Modifying Groups Deleting Groups Deleting Groups Batch User and Group Creation ADS/NT Configuration System Settings	45 46 47 48 48 49 50 50 51 51
Network Management WAN Configuration LAN Configuration DHCP Configuration Web Services Configuration AFP (Apple Network Setup) NFS Setup User and Group Management Local User Configuration Adding Users Modifying Users Deleting Users Local Groups Configuration Adding Groups Modifying Groups Deleting Groups Batch User and Group Creation ADS/NT Configuration System Settings System Notifications	4546474848495050515153
Network Management WAN Configuration LAN Configuration DHCP Configuration Web Services Configuration AFP (Apple Network Setup) NFS Setup User and Group Management Local User Configuration Adding Users Modifying Users Deleting Users Local Groups Configuration Adding Groups Modifying Groups Deleting Groups Deleting Groups Deleting Groups System Settings System Notifications SNMP	454647484849505051515153
Network Management WAN Configuration LAN Configuration DHCP Configuration Web Services Configuration AFP (Apple Network Setup) NFS Setup User and Group Management Local User Configuration Adding Users Modifying Users Deleting Users Local Groups Configuration Adding Groups Modifying Groups Deleting Groups Setup Batch User and Group Creation ADS/NT Configuration System Settings System Notifications SNMP System Logs	45464748484950505151515153
Network Management WAN Configuration LAN Configuration DHCP Configuration Web Services Configuration AFP (Apple Network Setup) NFS Setup User and Group Management Local User Configuration Adding Users Modifying Users Deleting Users Local Groups Configuration Adding Groups Modifying Groups Deleting Groups System Settings System Notifications SNMP System Logs Time and Date Settings	4546474848495051515151515151
Network Management WAN Configuration LAN Configuration DHCP Configuration Web Services Configuration AFP (Apple Network Setup) NFS Setup User and Group Management Local User Configuration Adding Users Modifying Users Deleting Users Local Groups Configuration Adding Groups Modifying Groups Deleting Groups Setup Batch User and Group Creation ADS/NT Configuration System Settings System Notifications SNMP System Logs	4546474848495051515151515151
Network Management WAN Configuration LAN Configuration DHCP Configuration Web Services Configuration AFP (Apple Network Setup) NFS Setup User and Group Management Local User Configuration Adding Users Modifying Users Deleting Users Local Groups Configuration Adding Groups Modifying Groups Deleting Groups Batch User and Group Creation ADS/NT Configuration System Settings System Notifications SNMP System Logs Time and Date Settings System Configuration Backup and Restore Module Management	45464748484950505151515151515455
Network Management WAN Configuration LAN Configuration DHCP Configuration Web Services Configuration AFP (Apple Network Setup) NFS Setup User and Group Management Local User Configuration Adding Users Modifying Users Deleting Users Local Groups Configuration Adding Groups Deleting Groups Deleting Groups System Settings System Notifications SNMP System Logs Time and Date Settings System Configuration Backup and Restore	45464748484950505151515151515455
Network Management WAN Configuration LAN Configuration DHCP Configuration Web Services Configuration AFP (Apple Network Setup) NFS Setup User and Group Management Local User Configuration Adding Users Modifying Users Deleting Users Local Groups Configuration Adding Groups Modifying Groups Deleting Groups Batch User and Group Creation ADS/NT Configuration System Settings System Notifications SNMP System Logs Time and Date Settings System Configuration Backup and Restore Module Management	45464748484950505151515151555555

Reboot and Shutdown System	58
Logout	58
Chapter 5: Additional Feature Setup	59
Overview	
FTP Server	
iTunes® Server	
Media Server	
Adding Media Share Folders	
Connecting DMAs to the Media Server	
Printer Server	
Windows XP SP2	
Windows Vista	
Download Manager	
<u> </u>	
Adding an HTTP Task	
Adding an FTP Task	
Adding a BT Task	
Deleting Tasks	
Scheduling Downloads	
Chapter 6: Using the ALL6800	
Overview	
Login Page	
Using WebDisk	
Photo Server	
Windows XP Publishing Wizard	
Managing Albums and Photos	85
Creating Albums	86
Password Protecting Albums	86
Uploading Pictures to Albums	
EXIF Information	86
Slide Shows	87
Mapping a Client PC to the ALL6800	87
Windows	87
Apple OS X	88
Mapping the ALL6800 as an iSCSI Drive	
Windows 2000/XP	
Windows Vista	
File Backup	
Nsync	
Adding an Nsync Task	
Setting Up an Nsync Target on an Nsync Device	
Setting Up an Nsync Target on Another Device	94
Designating ALL6800 as an Nsync Target	94
ALLNET Backup Utility	94
Windows XP Data Backup	96
Apple OS X Backup Utilities	96
Chapter 7: Tips and Tricks	97
USB and eSATA Storage Expansion	97
Adding a Spare Disk	
Remote Administration	
Part I - Setup a DynDNS Account	
Part II - Enable DDNS on the Router	
Part III - Setting up Virtual Servers (HTTPS)	
Firewall Software Configuration	
Replacing Damaged Hard Drives	
Hard Drive Damage	
Replacing a Hard Drive	
RAID Auto-Rebuild	

Chapter 8: Troubleshooting	101
Forgot My Network IP Address	101
Can't Map a Network Drive in Windows XP	101
Restoring Factory Defaults	
Problems with Time and Date Settings	101
Appendix A: Product Specifications	
Hardware Specifications	
Software Specifications	
Appendix B: RAID Basics	105
Overview	
Benefits	105
Improved Performance	105
Data Security	105
RAID Levels	105
RAID 0	105
RAID 1	106
RAID 5	106
RAID 6	106
RAID 10	106
JBOD	
Stripe Size	
Disk Usage	
Appendix C: Active Directory Basics	108
Overview	
What is Active Directory?	
ADS Benefits	
Appendix D: UPS Compatibility List	109
Appendix E: Licensing Information	112
Overview	
Source Code Availability	112
CGIC License Terms	113
GNU General Public License	113

Chapter 1: Introduction

Overview

Thank you for choosing the ALLNET ALL6800 NAS Disk Server. The ALLNET ALL6800 is an easy-to-use storage server that allows a dedicated approach to storing and distributing data on a network. Data reliability is ensured with RAID features that provide data security and recovery—over one Terabyte of storage is available using RAID 5 and RAID 6. Gigabit Ethernet ports enhance network efficiency, allowing the ALL6800 to take over file management functions, increase application and data sharing and provide faster data response. The ALL6800 offers data mobility with a disk roaming feature that lets you hot swap working hard drives for use in another ALL6800, securing the continuity of data in the event of hardware failure. The ALL6800 allows data consolidation and sharing between Windows (SMB/CIFS), UNIX/Linux, and Apple OS X environments. The ALL6800's user-friendly GUI supports multiple languages.

Product Highlights

File Server

First and foremost, the ALL6800 allows you to store and share files over an IP network. With a Network Attached Storage (NAS) device, you can centralize your files and share them easily over your network. With the easy-to-use web-based interface, users on your network can access these files in a snap.

To learn about the Web User Interface, go to **Chapter 6: Using the ALL6800 > Using WebDisk**.

FTP Server

With the built-in FTP Server, friends, clients, and customers can upload and download files to your ALL6800 over the Internet with their favorite FTP programs. You can create user accounts so that only authorized users have access.

To set up the FTP Server, refer to **Chapter 5: Additional Feature Setup > FTP Server**.

Backup Server

Don't leave precious data to chance. With advanced backup capabilities, you can easily upload mission critical files to the ALL6800, and even automate your backup tasks for true peace-of-mind.

To find out how to backup your files with the ALL6800, refer to **Chapter 6: Using the ALL6800 > File Backup**.

Printer Server

With the ALL6800's Printer Server, you can easily share an IPP printer with other PCs connected to your network.

To set up the Printer Server, refer to **Chapter 5: Additional Feature Setup > Printer Server**.

Multiple RAID

ALL6800 supports multiple RAID volumes on one system. So, you can create RAID 0 for your non-critical data, and create RAID 5 for mission-critical data. Create the RAID levels depending on your needs.

To configure RAID modes on the ALL6800, refer to **Chapter 4: System Management > Storage Management > RAID List**.

Dual Mode Support

ALL6800 is not only a file server, but it also supports iSCSI initiators. Your server can access ALL6800 as a direct-attached-storage over the LAN or Internet. There is no easier way to expand the capacity of your current application servers. All the storage needs can be centrally managed and deployed. This brings ultimate flexibility to users.

To set up an iSCSI volume, refer to Chapter 4: System Management > Storage Management > Space Allocation > Allocating Space for iSCSI Volume.

Superior Power Management

ALL6800 supports schedule power on/off. With this feature, administrator can set at what time to turn on or off the system. This feature is a big plus for people who want to conserve energy. Wake-On-LAN enables administrator to remotely turn on the system without even leaving their own seat.

To schedule system on and off, refer to Chapter 4: System Management > System Settings > Reboot and Shutdown System > Scheduled Power On/Off.

Package Contents

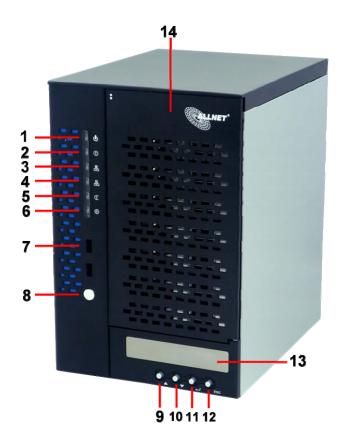
Your ALL6800 package should contain the following items:

- QIG
- CD-Title
- Ethernet Cable
- Screw Kit

Please check to see if your package is complete. If you find that some items are missing, contact your dealer.

Front Panel

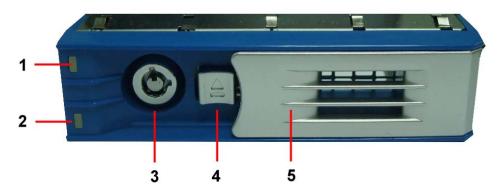
The ALLNET ALL6800's front panel has the device's controls, indicators, and hard disk trays:



Front Panel	
Item	Description
1.Power LED	Solid blue: System is power on.
2.System LED	• Solid orange: system is being upgraded or system startup;
	data currently inaccessible
3.WAN LED	Solid green: network link
	Blinking green: network activity
4.LAN LED	Solid green: network link
	Blinking green: network activity
5.USB Copy LED	Solid blue: files are being copied from a USB storage device
6.eSATA link LED	Solid blue: external eSATA device has connected
7.USB Port	USB 2.0 port for compatible USB devices, such as USB disks,
	USB printers, and USB wireless dongles*
8.Power Button	Power on/off ALL6800
9.Up Button ▲	Push to scroll up when using the LCD display
10.Down Button ▼	Push to enter USB copy operation screen
11.Enter Button →	Push to enter LCD operate password for basic system setting
12.Escape Button	Push to leave the current LCD menu
ESC	
13.LCD Display	Displays current system status and warning messages
14.HDD Trays	Seven 3.5" SATA HDD trays
	Locks are provided for added security

Hard Disk Trays

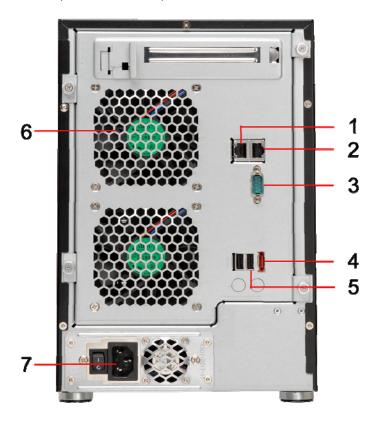
Each of the ALL6800's hard disk trays has a lock, a latch, and two LED indicators:



Hard Disk Trays	
Item	Description
1.HDD Power LED	Solid blue: hard disk is powered on
2.HDD	Blinking green: system is accessing data on the hard disk
Access/Error LED	
3.Lock	Use the lock to physically secure the hard disk to the unit
4.Latch	Use to open and remove or close and secure the tray
5.Handle	Pull out HDD tray

Rear Panel

The ALL6800 rear panel features ports and connectors.



Back Panel	
Item	Description
1.LAN Port	LAN port for connecting to an Ethernet network through a switch
	or router
2.WAN Port	WAN port for connecting to an Ethernet network through a
	switch or router
3.Serial Port	This port is for external UPS device
4.eSATA Port	eSATA port for high-speed storage expansion
5.USB Port	USB 2.0 port for compatible USB devices, such as USB disks,
	and USB printers
6.System Fan	System fan that exhausts heat from the unit
7.Power Connector	Connect the included power cords to these connectors

Chapter 2: Hardware Installation

Overview

Your ALL6800 is designed for easy installation. To help you get started, the following chapter will help you quickly get your ALL6800 up and running. Please read it carefully to prevent damaging your unit during installation.

Before You Begin

Before you begin, be sure to take the following precautions:

- 1. Read and understand the *Safety Warnings* outlined in the beginning of the manual.
- 2. If possible, wear an anti-static wrist strap during installation to prevent static discharge from damaging the sensitive electronic components on the ALL6800.
- 3. Be careful not to use magnetized screwdrivers around the ALL6800's electronic components.

Hard Disk Installation

The ALL6800 supports seven standard 3.5" Serial ATA (SATA) hard disks. To install a hard disk into the ALL6800, follow the steps below:

- 1. Remove a hard disk tray from the ALL6800.
- 2. Slide the new SATA hard disk into the tray and fasten the screws.
- 3. Insert the hard disk and tray back into the ALL6800 until it snaps into place and lock it with a key if desired.
- 4. The LED blinks green when the hard disk is accessed.

NOTE

If your HDD was part of a RAID 1 or RAID 5 array previously, it automatically rebuilds. If you replace all the drives with higher capacity drives, you will need to go to Administrator login and format the drives.

Cable Connections

To connect the ALL6800 to your network, follow the steps below:

1. Connect an Ethernet cable from your network to the WAN port on the back panel of the ALL6800.



2. Connect the provided power cord into the universal power socket on the back panel. Plug the other end of the cord into a surge protector socket. Press the power supply switch to turn on the power supply.



3. Press the power button on the Front Panel to boot up the ALL6800.



Checking System Status

After making connections on the ALL6800 and powering up, check whether the system status is normal or has trouble by observing indicators on the front panel and hard disk trays.

System Status Normal

The system status is normal if:

- 1. The WAN and LAN LEDs glow green (assuming both are connected).
- 2. The Power LED on the Front Panel glows blue.
- 3. The HDD Power LED on each HDD tray glows blue (assuming all disks are installed).
- 4. The default IP address of the WAN port is 192.168.1.100 displayed on LCD.





System Trouble

The system has trouble if:

1. System Busy LED glows red.

If the system has trouble, please refer to **Chapter 8: Troubleshooting**.



WARNING

There are no user serviceable parts inside the ALL6800. Please contact your distributor for service.

Chapter 3: First Time Setup

Overview

Once the hardware is installed, physically connected to your network, and powered on, you can configure the ALL6800 so that it is accessible to your network users. There are two ways to set up your ALL6800: using the **ALLNET Setup Wizard** or the **LCD display**. Follow the steps below for initial software setup.

ALLNET Setup Wizard

The handy ALLNET Setup Wizard makes configuring ALL6800 a snap. To configure the ALL6800 using the Setup Wizard, perform the following steps:

- 1. Insert the installation CD into your CD-ROM drive (the host PC must be connected to the network).
- 2. The Setup Wizard should launch automatically. If not, please browse your CD-ROM drive and double click on **Setup.exe**.



NOTE

For MAC OS X users, double click on ALLNET Setup Wizard 1.1.99.dmg

3. The Setup Wizard will start and automatically detect all ALLNET storage devices on your network. If none are found, please check your connection and refer to **Chapter 8: Troubleshooting** for assistance.

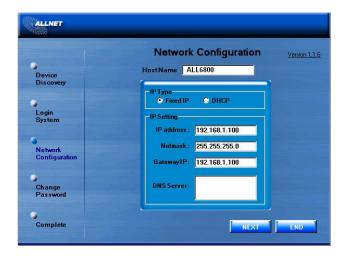


4. Select the ALL6800 that you like to configure.

5. Login with the administrator account and password. The default account and password are both "admin".



6. Name your ALL6800 and configure the network IP address. If your switch or router is configured as a DHCP Server, configuring the ALL6800 to automatically obtain an IP address is recommended. You may also use a static IP address and enter the DNS Server address manually.



7. Change the default administrator password.



8. Finished! Access the ALL6800 Web Administrator Interface by pressing the *Start Browser* button. You can also configure another ALL6800 at this point by clicking the *Setup Other Device* button. Press *Exit* to exit the wizard.



NOTE

The ALLNET Setup Wizard is designed for installation on systems running Windows XP/2000 or Mac OSX or later. Users with other operating systems will need to install the ALLNET Setup Wizard on a host machine with one of these operating systems before using the unit.

LCD Operation

The ALL6800 is equipped with an LCD on the front for easy status display and setup. There are four buttons on the front panel to control the LCD functions.

LCD Controls

Use the **Up** (\blacktriangle), **Down** (\blacktriangledown), **Enter** (\dashv) and **Escape** (**ESC**) keys to select various configuration settings and menu options for ALL6800 configuration.

The following table illustrates the keys on the front control panel:

_LCD Controls		
Icon	Function	Description
A	Up Button	Select the previous configuration settings option.
lacktriangle	Down Button	USB copy confirmation display.
4	Enter	Enter the selected menu option, sub-menu, or parameter setting.
ESC	Escape	Escape and return to the previous menu.

There are two modes of operation for the LCD: **Display Mode** and **Management Mode**.

Display Mode

During normal operation, the LCD will be in **Display Mode**.

Display Mode	
Item	Description
Host Name	Current host name of the system.
WAN	Current WAN IP setting.
LAN	Current LAN IP setting.
Link Aggregation	Current Link Aggregation status (ALL6800 only)
System Fan1	Current system fan 1 status.

System Fan2	Current system fan 2 status.
CPU Fan	Current CPU fan status
2006/06/16 12:00	Current system time.
Disk Info	Current status of disk slot has been installedh
RAID	Current RAID status.

The ALL6800 will rotate these messages every one-two seconds on the LCD display.

USB Copy

The USB Copy function enables you to copy files stored on USB devices such as USB disks and digital cameras to the ALL6800 with a press of a button. To use USB copy, follow the steps below:

- 1. Plug your USB device into an available USB port on the Front Panel.
- 2. In **Display Mode**, press the **Down Button** (▼).
- 3. The LCD will display "USB Copy?"
- 4. Press **Enter** (→) and the ALL6800 will start copying USB disks connected to the front USB port.
- 5. All of data will be copied into system folder named "USBcopy".

Management Mode

During setup and configuration, the LCD will be in **Management Mode**.

To enter into Management Mode, press **Enter ()** and an "Enter Password" prompt will show on the LCD.

At this time, the administrator has to enter the correct LCD password. System will check whether the correct LCD password has been entered. The default LCD password is "0000". If correct password is entered, you will enter into the **Management Mode** menu.

Management Mode	
Item	Description
WAN Setting	IP address and netmask of your WAN ports.
LAN Setting	IP address and netmask of your LAN ports.
Link Agg. Setting	Select Load Balance or Failover. (ALL6800 only)
Change Admin Passwd	Change administrator's password for LCD operation.
Reset to Default	Reset system to factory defaults.
Exit	Exit Management Mode and return to Display Mode.

NOTE

You can also change your LCD password using the Web Administration Interface by navigating to **System** > **Administrator Password**. For more on the Web Administration Interface, see **Chapter 4: System Management**.

Typical Setup Procedure

From the Web Administration Interface, you can begin to setup your ALL6800 for use on your network. Setting up the ALL6800 typically follows the five steps outlined below.

For more on how to use the Web Administration Interface, see **Chapter 4:**System Management > Web Administration Interface.

Step 1: Network Setup

From the Web Administration Interface, you can configure the network settings of the ALL6800 for your network. You can access the **Network** menu from the menu bar.

For details on how to configure your network settings, refer to **Chapter 4:**System Management > Network Management.

Step 2: RAID Creation

Next, administrators can configure their preferred RAID setting and build their RAID volume. You can access RAID settings from the menu bar of the Web Administration Interface by navigating to **Storage** > **RAID**.

For more information on configuring RAID, see **Chapter 4: System Management > RAID Configuration**.

Don't know which RAID level to use? Find out more about the different RAID levels from **Appendix C: RAID Basics**.

Step 3: Create Local Users or Setup Authentication

Once the RAID is ready, you can begin to create local users for the ALL6800, or choose to setup authentication protocols such as Active Directory (AD).

For more on managing users, go to **Chapter 4: System Management > User and Group Management**.

For more information on configuring Active Directory, see **Chapter 4: System Management > User and Group Management > ADS/NT Configuration**.

For information about the benefits of Active Directory, see **Appendix D: Active Directory Basics**.

Step 4: Create Folders and Set Up ACLs

Once users are introduced into your network, you can begin to create various folders on the ALL6800 and control user access to each using Folder Access Control Lists.

More information on managing folders, see **Chapter 4: System Management > Folder Management**.

To find out about configuring Folder Access Control Lists, see **Chapter 4: System Management > Folder Management > Folder Access Control List (ACL)**.

Step 5: Start Services

Finally, you can start to setup the different services of the ALL6800 for the users on your network. You can find out more about each of these services by clicking below:

SMB/CIFS

Apple File Protocol (AFP)

Network File System (NFS)

File Transfer Protocol (FTP)

iTunes Server

Media Server

Printer Server

Download Manager

Photo Server

Chapter 4: System Management

Overview

The ALL6800 provides an easily accessible **Web Administration Interface**. With it, you can configure and monitor the ALL6800 anywhere on the network.

Web Administration Interface

Make sure your network is connected to the Internet. To access the ALL6800 **Web Administration Interface**:

1. Type the ALL6800's IP address into your browser. (Default IP address is http://192.168.1.100)



NOTE

Your computer's network IP address must be on the same subnet as the ALL6800. If the ALL6800 has default IP address of 192.168.1.100, your managing PC IP address must be 192.168.1.x, where x is a number between 1 and 254, but not 100.

2. Login to the system using the administrator user name and password. The factory defaults are:

User Name: admin Password: admin

If you changed your password in the setup wizard, use the new password.

Once you are logged in as an administrator, you will see the **Web Administration Interface**. From here, you can configure and monitor virtually every aspect of the ALL6800 from anywhere on the network.

Menu Bar

The **Menu Bar** is where you will find all of the information screens and system settings of the ALL6800. The various settings are placed in the following groups on the menu bar:

Menu Bar	
Item	Description
Status	Current system status of the ALL6800.
Storage	Information and settings for storage devices installed into the ALL6800.
Network	Information and settings for network connections, as well as various services of the ALL6800.
Accounts	Allows configuration of users and groups.
System	Various ALL6800 system settings and information.
Language	Choose your preferred language here.

Moving your cursor over any of these items will display the dropdown menu selections for each group.

In the following sections, you will find detailed explanations of each function, and how to configure your ALL6800.

Language Selection

The ALL6800 supports multiple languages, including:

- English
- French
- German
- Italian
- Traditional Chinese
- Simplified Chinese
- Japanese
- Korean
- Spanish



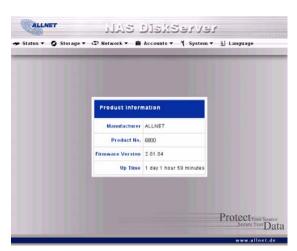
On the menu bar, click *Language* and the **Change Language** screen appears. This screen allows you to select preferred language for the ALL6800. Press *Apply* to confirm your selection.

Status Menu

The **Status** Menu on the menu bar allows you to see various aspects of the ALL6800. From here, you can discover the status of the ALL6800, and even find out other details like firmware version and up time.

Product Information

Once you login, you will first see the basic **Product Information** screen providing **Manufacturer**, **Product No.**, **Firmware Version**, and **Up Time** information.



Product Information	
Item	Description
Manufacturer	Displays the name of the system manufacturer.
Product No.	Shows the model number of the system.
Firmware version	Shows the current firmware version.
Up time	Displays the total run time of the system.

To access this screen again, navigate to **Status** > **About**.

System/Service Status

From the **Status** menu, choose the **System** item, and the **System Status** and **Service Status** screens appear. These screens provide basic system and service status information.

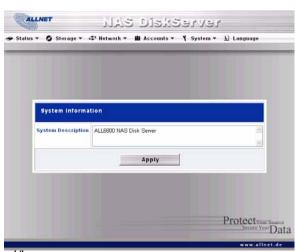


System Status	
Item	Description
CPU Loading (%)	Displays current CPU workload of the ALL6800.
CPU Fan Speed	Displays current CPU fan status.
System Fan1 Speed	Displays the current status of the system fan 1.
System Fan2 Speed	Displays the current status of the system fan 2.
Up Time	Shows how long the system has been running.

Service Status	
Item	Description
AFP Status	The status of the Apple Filing Protocol server.
NFS Status	The status of the Network File Service Server.
SMB/CIFS Status	The status of the SMB/CIFS server.
FTP Status	The status of the FTP server.
Media Server	The status of the Media Server
Nsync Status	The status of the Nsync server.
UPnP Status	The status of the UPnP service.
SNMP	The status of the SNMP service.

System Information

From **Status** menu, choose the *Info* item, and the **System Information** screen appears. You can change the system information that appears on the Login page by entering the new information here and pressing *Apply* to confirm.



System Information	
Item	Description
System Description	Shows the system description that would also appear on the Login page.

Printer Status

From the **Status** menu, choose the **Printer** item, and the **Printer Information** screen appears. This screen provides the following information about the USB printer connected to the USB port.



Printer Status	
Item	Description
Manufacturer	Displays the name of the USB printer manufacturer.
Model	Displays the model of the USB printer.
Status	Displays the status of the USB printer.
Remove document	Click to remove all documents from printer queue
from Queue	
Restart Printer service	Click to restart printer service

If a corrupt print job is sent to a printer, printing may suddenly fail. If your print jobs seem to be locked up, pressing the *Remove All Documents* button to clear the print queue may resolve the issue.

For information on how to set up the Printer Server, refer to **Chapter 5**: **Additional Feature Setup > Printer Server**.

UPS Settings

The ALL6800 can also support various uninterruptible power supply units, providing extra data security and accessibility in the case of a power failure.

From the **Status** menu, choose the **UPS** item and the **UPS Setting** screen appears. Make any changes you wish, and press **Apply** to confirm changes. See the following table for a detailed description of each item.



UPS Settings	
Item	Description
UPS Monitoring	Enable or disable UPS monitoring.
Manufacturer	Choose the UPS manufacturer and model number
	from the dropdowns.
Battery Status	Current status of the UPS battery
Power	Current status of the power being supplied to the
	UPS
Seconds between power failure and	Delay between power failure and first notification
first notification	in seconds.
Seconds between subsequent power	Delay between subsequent notifications in
failure notifications	seconds.
Shutdown the system when the	Amount of UPS battery remaining before system
battery charge is less than	should auto-shutdown.
Apply	Press <i>Apply</i> to save your changes.

For a list of supported UPS units, see Appendix E: UPS Compatibility List.

Wake-Up On Lan (WOL)

The ALL6800 has the ability to be awoken from sleep mode via WAN port.

From the **Status** menu, choose the **WOL** item, and the **Wake-up On Lan Configuration** screen appears. From here, you can **Enable** or **Disable**.



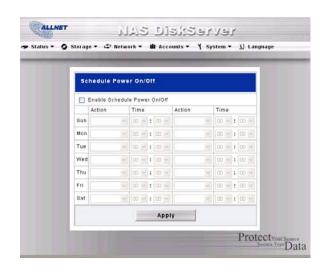
Wake-up On Lan Configuration	
Item	Description
WOL Servic	Enable or Disable WOL service
Apply	Click Apply to save changes.

Power Management

Using the ALL6800's Power Management, you can save energy and money by scheduling the ALL6800 to turn itself on and off during certain times of the day.

From the **Status** menu, choose the **Power Mgmt** item and the **Schedule Power On/Off** screen appears.

To designate a schedule for the ALL6800 to turn on and off, first



enable the feature by checking the Enable Schedule Power On/Off checkbox.

Then, simply choose an on and off time for each day of the week that you would like to designate a schedule by using the various dropdowns.

Finally, click *Apply* to save your changes.

Example - Monday: On: 8:00; Off: 16:00

System will turn on at 8:00 AM on Monday, and off at 16:00 on Monday. System will turn on for the rest of the week.

If you choose an on time, but do not assign an off time, the system will turn on and remain on until a scheduled off time is reached, or if the unit is shutdown manually.

Example - Monday: On: 8:00

System will turn on at 8:00 AM on Monday, and will not shut down unless powered down manually.

You may also choose two on times or two off times on a particular day, and the system will act accordingly.

Example - Monday: Off: 8:00; Off: 16:00

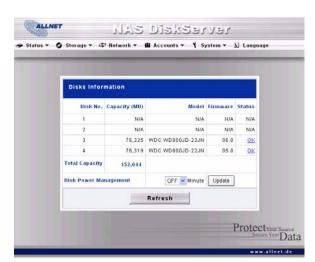
System will turn off at 8:00 AM on Monday. System will turn off at 16:00 PM on Monday, if it was on. If the system was already off at 16:00 PM on Monday, system will stay off.

Storage Management

The **Storage Menu** displays the status of storage devices installed in the ALL6800, and includes storage configuration options such as RAID and disk settings, folder configuration, and Nsync settings.

Disks Information

From the **Storage** menu, choose the **Disks** item and the **Disks**Information screen appears. From here, you can see various items about installed SATA hard disks.
Blank lines indicate that a SATA hard disk is not currently installed in that particular disk slot.



Disks Information	on
Item	Description
Disk No.	Indicates disk location.
Capacity	Shows the SATA hard disk capacity.
Model	Displays the SATA hard disk model name.
Firmware	Shows the SATA hard disk firmware version.
Status	Indicates the status of the disk. Can read OK , Warning , or Failed .

Total Capacity	Shows the total SATA hard disk capacity.
Disk Power	The administrator can set the disk to power down after a period
Management	of inactivity.

NOTE

When the Status shows Warning, it usually means there are bad sectors on the hard disk. It is shown only as a precaution and you should consider changing the drives.

S.M.A.R.T. Information

On the **Disks Information** screen, the status of each disk will be displayed in the **Status** column. Clicking on an **OK** or **Warning** link will display the **S.M.A.R.T Information** window for that particular disk.



S.M.A.R.T. Information	
Item	Description
Tray Number	Tray the hard disk is installed in.
Model	Model name of the installed hard disk.
Power ON Hours	Count of hours in power-on state. The raw value of this attribute
	shows total count of hours (or minutes, or seconds, depending
	on manufacturer) in power-on state.
Temperature Celsius	The current temperature of the hard disk in degrees Celsius
Reallocated Sector	Count of reallocated sectors. When the hard drive finds a
Count	read/write/verification error, it marks this sector as "reallocated"
	and transfers data to a special reserved area (spare area).
	This process is also known as remapping and "reallocated"
	sectors are called remaps. This is why, on a modern hard disks,
	you can not see "bad blocks" while testing the surface - all bad
	blocks are hidden in reallocated sectors. However, the more
	sectors that are reallocated, the more a decrease (up to 10% or
	more) can be noticed in disk read/write speeds.
Current Pending	Current count of unstable sectors (waiting for remapping). The
Sector	raw value of this attribute indicates the total number of sectors
	waiting for remapping. Later, when some of these sectors are
	read successfully, the value is decreased. If errors still occur
	when reading sectors, the hard drive will try to restore the data,
	transfer it to the reserved disk area (spare area), and mark this
	sector as remapped. If this attribute value remains at zero, it
	indicates that the quality of the corresponding surface area is
	low.
Raw Read Error Rate	This attribute value depends on read errors and disk surface
	condition, and indicates the rate of hardware read errors that
	occurred when reading data from a disk surface. Lower values
	indicate that there is a problem with either the disk surface or
	the read/write heads.
Seek Error Rate	Rate of seek errors by the magnetic heads. If there is a failure
	in the mechanical positioning system, servo damage or a
	thermal widening of the hard disk, seek errors arise. More seek
	errors indicates a worsening condition of a disk surface and the
	disk mechanical subsystem.
Back	Press <i>Back</i> to go back to the Disks Information screen.

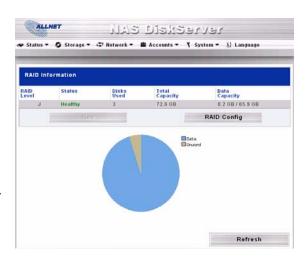
NOTE

If the Reallocated Sector Count or Current Pending Sector of a hard disk drive is not zero, the status of the disk will show "Warning". This warning is only used to alert the system administrator that there are bad sectors on the disk, and they should replace those disks as soon as possible.

RAID Information

From the **Storage** menu, choose the **RAID** item and the **RAID** List screen appears.

This screen lists the RAID volumes currently residing on the ALL6800. From this screen, you can get information about the status of your RAID volumes, as well as the capacities allocated for data and iSCSI. There is also a graph which represents how the RAID volume is currently allocated.



To configure your RAID settings, press the *RAID Config* button to go to the RAID Configuration screen.

RAID Information	
Item	Description
Select	Used to select the current RAID volume.
Master RAID	The RAID volume currently designated as the Master RAID
	volume.
ID	ID of the current RAID volume.
	NOTE: All RAID IDs must be unique.
RAID Level	Shows the current RAID configuration.
Status	Indicates status of the RAID. Can read either <i>Healthy</i> ,
	Degraded , or Damaged .
Disks Used	Hard disks used to form the current RAID volume.
Total Capacity	Total capacity of the current RAID.
Data Capacity	Indicates the used capacity and total capacity used by user
-	data.
iSCSI Capacity	Indicates the capacity allocated to iSCSI.
RAID Config	Press this to configure RAID volumes.
Space Allocation	Press this to adjust the space allocated for data, and iSCSI.

RAID Configuration

On the **RAID List** screen, press the *RAID Config* button to go to the **RAID Configuration** screen. In addition to RAID disk information and status, this screen lets you make RAID configuration settings.

For more information on RAID, see **Appendix C: RAID Basics**.



RAID Level

You can set the storage volume as **JBOD**, **RAID 0**, **RAID 1**, **RAID 5**, **RAID 6 or RAID 10**. RAID configuration is usually required only when you first set up the device. A brief description of each RAID setting follows:

RAID Levels	
Level	Description
JBOD	The storage volume is a single HDD with no RAID support. JBOD requires a minimum of 1 disk.
RAID 0	Provides data striping but no redundancy. Improves performance but not data safety. RAID 0 requires a minimum of 2 disks.
RAID 1	Offers disk mirroring. Provides twice the read rate of single disks, but same write rate. RAID 1 requires a minimum of 2 disks.
RAID 5	Data striping and stripe error correction information provided. RAID 5 requires a minimum of 3 disks. RAID 5 can sustain one failed disk.
RAID 6	Two independent parity computations must be used in order to provide protection against double disk failure. Two different algorithms are employed to achieve this purpose. RAID 6 requires a minimum of 4 disks. RAID 6 can sustain two failed disks.
RAID 10	RAID 10 has high reliability and high performance. RAID 10 is implemented as a striped array whose segments are RAID 1 arrays. It has the fault tolerance of RAID 1 and the performance of RAID 0. RAID 10 requires 4 disks. RAID 10 can sustain two failed disks.

WARNING

If the administrator improperly removes a hard disk that should not be removed when RAID status is Degraded, all data will be lost.

RAID Configuration

Using RAID $\textbf{Settings},\ \text{you}$ can select stripe size, choose which disks are RAID disks or the Spare Disk. .

RAID Configurations		
Item	Description	
RAID	Check the boxes of the hard drives you wish to add to the	
	storage volume.	
Master RAID	Check a box to designate this as the Master RAID volume. See	
	the NOTE below for more information.	
Disk No.	Number assigned to the installed hard disks.	
Capacity (MB)	Capacity of the installed hard disks.	
Model	Model number of the installed hard disks.	
Status	Status of the installed hard disks.	
Member	If this is checked, current hard disk is a part of a RAID volume.	
Spare	If this is checked, current hard disk is designated as a spare for	
	a RAID volume.	
Stripe Size	This sets the stripe size to maximize performance of sequential	
	files in a storage volume. Keep the 64K setting unless you	
	require a special file storage layout in the storage volume. A	
	larger stripe size is better for large files.	
Used Percentage	The percentage of the RAID volume that will be used to store	
	data.	
Apply	Press this button to configure a file system and create the RAID	
	storage volume.	

Remove	Click to remove the RAID volume. All user data, iSCSI will be removed.
Back	Press this button to exit without saving changes.
Expand	Press this button to configure a file system and create the RAID storage volume.
Migration	Press this button to migrate RAID level.

Creating a RAID

To create a RAID volume, follow the steps below:

- 1. On the RAID Information screen, click New.
- On the RAID Configuration screen, set the RAID storage space as JBOD, RAID 0, RAID 1, RAID 5, RAID 6, or RAID 10 — see Appendix C: RAID Basics for a detailed description of each.
- 3. Specify a RAID ID.
- 4. If this RAID volume is meant to be the Master RAID volume, tick the **Master RAID** checkbox.

NOTE

In a multiple RAID configuration, one RAID volume must be designated as the Master RAID volume. The Master RAID volume will store all installed modules. If the Master RAID is changed to another location (i.e. assigning HDD 2 to be the Master RAID volume after HDD 1 had been previously assigned), then all modules must be reinstalled. In addition, all system folders that were contained on the Master RAID volume will be invisible. Reassigning this volume to be the Master RAID will make these folders visible again.

- 5. Tick the checkboxes under the "member" heading of the hard disks you wish to use to create a RAID.
- 6. Specify a stripe size 64K is the default setting.
- 7. Specify the percentage allocated for user data. The remaining space will be made available for iSCSI target.
- 8. Selected the file system you like to have for this RAID volume.

NOTE

Select ZFS file system while snapshot is needed It is only one ZFS file system allowed to be created per system.
ZFS file system is only accessible by CIFS/SMB, not for AFP and NFS users.

9. Press *Apply* to build the RAID storage volume.

NOTE

Building a RAID storage space may take time, depending on the size of hard drives and RAID mode.

WARNING

Creating RAID destroys all data in the current RAID volume. The data is unrecoverable.

With a RAID 1, RAID 5, RAID 6, or RAID 10 volume, you can also add a spare disk after the RAID is created. See **Chapter 7: Tips and Tricks > Adding a Spare Disk** for details.

Expanding a RAID

To expand a RAID 1, RAID 5, RAID 6, or RAID 10 volume, follow the steps below:

- 1. Replace one of the hard drives in the RAID volume and allow it to automatically rebuild.
- 2. Once rebuilt, you can continue to replace any remaining disks in the RAID array.
- 3. When you are done replacing hard drives, log on to Web Management. Navigate to **Storage** > *RAID* to open the **RAID** List screen.
- 4. On the **RAID** List screen, select the RAID volume by clicking on its radio button, and click *RAID* Config to open the RAID Configuration screen.
- 5. On the RAID Configuration screen, click Expand.

Migrating a RAID

Once a RAID volume has been created, you may want to move it to other physical drives or change the RAID array all together. To migrate a RAID 0, RAID 1, or RAID 5 volume, follow the steps below:

- 1. From the RAID Configuration screen, click Migrate RAID.
- A list of possible RAID migration configurations will be listed. Select the desired migration scheme and click OK.



3. The system will begin migrating the RAID volume.

NOTE

Migrating a RAID volume could take several hours to complete

Below is a table listing of possible RAID migration schemes:

To→		
	RAID 0	RAID 5
↓ From		
	[RAID 0] HDDx2 to [RAID 0] HDDx3	[RAID 0] HDDx2 to [RAID 5] HDDx3
	[RAID 0] HDDx2 to [RAID 0] HDDx4	[RAID 0] HDDx2 to [RAID 5] HDDx4
RAID 0	[RAID 0] HDDx2 to [RAID 0] HDDx5	[RAID 0] HDDx2 to [RAID 5] HDDx5
KAIDU	[RAID 0] HDDx3 to [RAID 0] HDDx4	[RAID 0] HDDx3 to [RAID 5] HDDx4
	[RAID 0] HDDx3 to [RAID 0] HDDx5	[RAID 0] HDDx3 to [RAID 5] HDDx5
	[RAID 0] HDDx4 to [RAID 0] HDDx5	[RAID 0] HDDx4 to [RAID 5] HDDx5
	[RAID 1] HDDx2 to [RAID 0] HDDx2	[RAID 1] HDDx2 to [RAID 5] HDDx3
RAID 1	[RAID 1] HDDx2 to [RAID 0] HDDx3	[RAID 1] HDDx2 to [RAID 5] HDDx4
	[RAID 1] HDDx2 to [RAID 0] HDDx4	[RAID 1] HDDx2 to [RAID 5] HDDx5

	[RAID 1] HDDx2 to [RAID 0] HDDx5	
RAID 5	X	[RAID 5] HDDx3 to [RAID 5] HDDx4 [RAID 5] HDDx3 to [RAID 5] HDDx5 [RAID 5] HDDx4 to [RAID 5] HDDx5

Deleting a RAID

To delete a RAID volume, follow the steps below:

- 1. On the RAID List screen, select the RAID volume by clicking on its radio button, and click *RAID Config* to open the RAID Configuration screen.
- 2. On the RAID Configuration screen, click Remove RAID.
- 3. The confirmation screen appear, you will have to input "Yes" with exactly wording case to complete "Remove RAID" operation



Removing RAID destroys all data in the current RAID volume. The data is unrecoverable.

Space Allocation

You may specify the space allocated for iSCSI volumes.

To do this, under the **Storage** menu, click **RAID** and the **RAID** List window appears. Select the RAID volume you wish to reallocate by clicking on its radio button, and click **Space Allocation**. The **RAID Information** and **Volume Allocation** List windows will appear.

The Volume Allocation List displays the space allocated for **iSCSI** volumes on the current RAID volume. The ALL6800 supports up to **5** iSCSI volumes in each RAID volume.

Volume Allocation List	
Item	Description
Modify	Click this to modify the allocated space.
Del	Click this to delete the allocated space.
Type	Type of volume. Can be either USB or iSCSI.
Name	Name assigned to the volume.
Capacity	Capacity of the allocated space.
iSCSI Target	Click to allocate space to iSCSI volume.

Allocating Space for iSCSI Volume

To allocate space for an iSCSI volume on the current RAID volume, follow the steps below:

1. Under the Volume Allocation List, click iSCSI Target.



The Create iSCSI Volume screen appears.

Create iSCSI Volume	
Item	Description
RAID ID	ID of current RAID volume.
Unused	Percentage and amount of unused space on current RAID
	volume.
Allocation	Percentage and amount of space allocated.
iSCSI Target Service	Enable or Disable the iSCSI Target service.
Authentication	You may choose CHAP authentication or choose None.
Target Name	Name of the iSCSI Target. This name will be used by the
	Stackable NAS function to identify this export share.
Year	Select the current year from the dropdown.
Month	Select the current month from the dropdown.
Username	Enter a username.
Password	Enter a password.
Password Confirm	Reenter the chosen password
IQN	The iSCSI Qualified Name
Initiator Information	Shows the name and status of iSCSI initiators logged on
	the system
OK	Click OK to save changes.
Back	Click Back to exit without saving.

- 2. Designate the percentage to be allocated from the **Allocation** dropdown.
- 3. Enable the **iSCSI Target Service** by selecting *Enable*.
- 4. Choose to enable CHAP authentication or choose None.
- 5. Enter a **Target Name**. This will be used by the **Stackable NAS** function to identify this export share.
- 6. Choose the current year from the **Year** dropdown.
- 7. Choose the current month from the **Month** dropdown.
- 8. If you've enabled CHAP authentication, enter a **username** and a **password**. Confirm your chosen password be reentering it in the **Password Confirm** box.

9. Click **OK** to create the iSCSI volume.

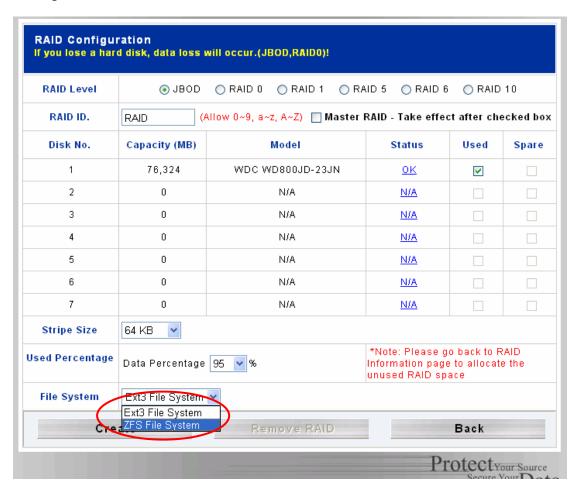
Stackable NAS

The ALL6800's capacity can be expanded even further using the stackable function. With it, users can expand the capacity of their network storage systems with up to 5 other stack target volumes which are located in different systems. These can be stacked through single network access like SMB or AFP acting as a share folder type.

For detailed instructions on how to use this feature, please refer to the **Stackable User Guide**.

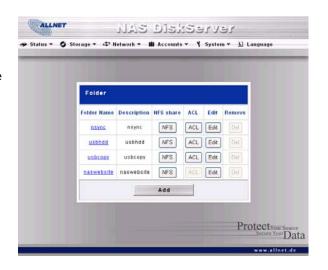
Snapshot

The ALL6800 is capable for snapshot version control supported. To have snapshot to work on the file system creation for RAID volume has to be "ZFS". For more information how to using snapshot, please refer to next section "Folder management".



Folder Management

From the **Storage** menu, choose Folder, and the Folder screen appears. This screen allows you to create and configure folders on the ALL6800 volume.



Folder	
Item	Description
Folder name	Displays the name of the folder.
Description	Provides a description of the folder.
NFS Share	Press NFS Share to configure which hosts on the network are
	allowed to access this folder using NFS.
	With "ZFS" file system selected RAID volume, it is un-
	configurable.
ACL	Press ACL (Access Control List) to configure which users have
	access to this folder.
Edit	Press <i>Edit</i> to enter the <i>Edit</i> screen and modify the folder's
	name and description.
Snapshot	Press Snap to open snapshot configuration screen, the button
	will be only configurable with "ZFS" file system selected RAID
	volume.
Del	Press <i>Del</i> to delete the folder. A prompt appears asking to
	confirm the deletion.
Add	Press <i>Add</i> to enter the Add Folder screen.

NOTE

Nsync folders will be created once the RAID is created. Nsync folder is used by Nsync server. It will be used for files backed up by Nsync.

Adding Folders

On the Folder screen, press the Add button and the Add Folder screen appears. This screen allows you to add a folder. After entering the information, press *Apply* to create new folder. Press Back to return to the Folder screen.



Add Folder	
Item	Description
RAID ID	RAID volume where the new folder will reside.
Folder Name	Enter the name of the folder.
Description	Provide a description the folder.
Browseable	Enable or disable users from browsing the folder contents. If Yes is selected, then the share folder will be browseable.
Public	Admit or deny public access to this folder. If Yes is selected, then users do not need to have access permission to write to this folder. When accessing a public folder via FTP, the behavior is similar to anonymous FTP. Anonymous users can upload/download a file to the folder, but they cannot delete a file from the folder.
Share Folder Limit	Enter the maximum size of the folder in Gigabytes (GB). The folder cannot grow beyond this limit. You can enter a 0 to turn off the share folder limit.
Apply	Press <i>Apply</i> to create the folder.
Back	Press <i>Back</i> to return to the Folder screen.

NOTE

Folder names are limited to 60 characters. Systems running Windows 98 or earlier may not support file names longer than 15 characters.

Editing Folders

On the **Folder** screen, press the *Edit* button and the **Edit Folder** screen appears. This screen allows you to change folder information. After entering the information, press *Submit* to apply the changes. Press *Back* to return to the **Folder** screen.

Edit Folder	
Item	Description
Share Name	Enter the name of the (Share) folder.
Comment	Provide a description the folder.
Browseable	Enable or disable users from browsing the folder contents. This setting will only apply while access via SMB/CIFS and web disk.
Public	Admit or deny public access to this folder.
Share Limit	Enter the maximum size of the folder. The folder will not grow beyond this limit. You can enter a 0 to turn off the share folder limit.
Submit	Press Submit to save your changes.
Back	Press Back to return to the Folder screen.

Deleting Folders

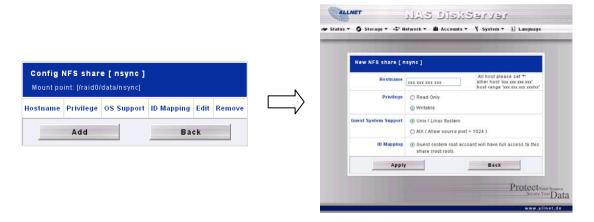
To delete a folder, press the **Del** button from the specified folder row. The system will confirm folder deletion. Press **OK** to delete the folder permanently or **Cancel** to go back to the folder list.

WARNING

All the data stored in the folder will be deleted once the folder is deleted. The data will not be recoverable.

NFS Share

To allow NFS access to the share folder, enable the **NFS Service**, and then set up hosts with access rights by clicking *Add*.



NFS Share	
Item	Description
Hostname	Enter the name or IP address of the host
Privilege	Host has either read only or writeable access to the folder.
Guest System Support	There are two selections available:
	Unix / Linux System
	 AIX (Allow source port > 1024)
	Choose the one which best fits your needs.
IO Mapping	There are three selections available:
	Guest system root account will have full access to this
	share (root:root).
	 Guest system root account will be mapped to
	anonymous user (nobody:nogroup) on NAS.
	 All user on guest system will be mapped to anonymous
	user (nobody:nogroup) on NAS.
	Choose the one which best fits your needs.
Apply	Click to save your changes.
Back	Click to abandon changes.

Snap (Snapshot configuration)

If added folder has located in the RAID volume with "ZFS" file system, then the folder management screen with "Snap" button will be configurable. Clicking on "Snap" then screen appears as following.





Snapshot	
Item	Description
Take Shot	Click to take snapshot right away.
Schedule	Click to open snapshot schedule setup screen.
Back	Click to go back folder management screen.

Clicking on schedule button then schedule setup screen appear. Checked the enable check box to activate the snapshot scheduled operation.



The ALL6800 snapshot is supported total **16 versions**. Once checked "Automatically remove oldest snapshot", the oldest will be removed to let newest to added on top. Otherwise, if the check box is unchecked and snapshot versions are up to 16 then system will appear warning message and won't execute the task till available version count.

The snapshot schedule rules can be setup for monthly, weekly or daily hour.



Clicking on Apply after firmed with desired schedule or click back to Snap screen.

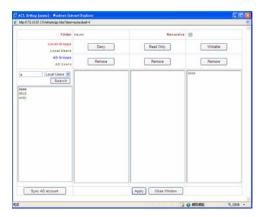
If any snapshot has taken then it will listed in Snapshot list as example below. This example shows folder "test" has created under RAID volume in ZFS file system. It has been taken snapshot twice so far at time displayed.



These taken snapshot is only accessible though CIFS/SMB by manually type **\\NAS IP address\\snapshot** and invisible from normal access. Also, the taken snapshot version is read only can not be deleted under CIFS/SMB access but only click the "Del" button showing on the screen shot above.

Folder Access Control List (ACL)

On the Folder screen, press the *ACL* button, and the *Access Control List* screen appears. This screen allows you to configure access to the specific folder for users and groups. Select a user or a group from the left hand column and then choose *Deny*, *Read Only*, or *Writable* to configure their access level. Press the *Submit* button to confirm your settings.



Access Contro	l List
Item	Description
Deny	Denies access to users or groups who are displayed in this
	column.

Read Only	Provides Read Only access to users or groups who are displayed
	in this column.
Writable	Provides Write access to users or groups who are displayed in
	this column.
Remove	Removes the selected user or group from the column in order to
	reset their access privileges.
Sync AD account	Press this button when there is no list from ADS/PDC or more
	ADS user has been added but yet appear from list.
Submit	Submits and confirms settings.
Reset	Cancel your settings and return to the Folder screen.

To configure folder access, follow the steps below:

- 1. On the **ACL** screen, all network groups and users are listed in the left hand column. Select a group or user from this list.
- 2. With the group or user selected, press one of the buttons from the three access level columns at the top. The group or user then appears in that column and has that level of access to the folder.
- 3. Continue selecting groups and users and assigning them access levels using the column buttons.
- 4. To remove a group or user from an access level column, press the *Remove* button in that column.
- 5. When you are finished, press *Submit* to submit and confirm your ACL settings.



The ACL screen also allows you to search for a particular user. To do this, follow the steps below:

а

aaaa

abcd

- 1. In the blank, enter the name of the user you would like to find.
- 2. From the drop down select the group you would like to search for the user in.
- 3. Click Search.



File System Check

The File System Check allows you to perform a check on the integrity of your disks' file system. Under the **Storage** menu, click *Filesystm Check* and the **File System Check** prompt appears.



Local Users V

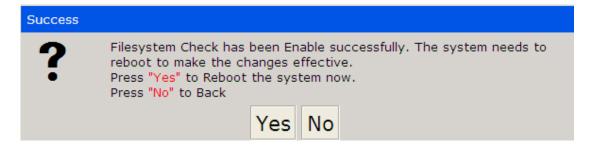
Local Groups

Local Users AD Groups

AD Users

To perform a file system check, click Apply.

Once clicked, the following prompt will appear:



Click Yes to reboot the system.

Once the system has rebooted, you will be returned to the **File System Check** prompt. There you will see the available RAID volumes to run the file system check on. Check the desired RAID volumes and click **Next** to proceed with the file system check. Click **Reboot** to reboot without running the check.

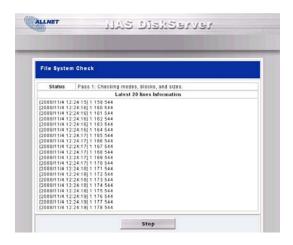


Once you click *Next*, you will see the following screen:



Click *Start* to begin the file system check. Click *Back* to return to the previous screen. Click *Reboot* to reboot the system.

When the file system check is run, the system will show 20 lines of information until it is complete. Once complete, the results will be shown at the bottom.



NOTE

The system must be rebooted before the ALL6800 can function normally.

Advance Option

There are 5 items is currently allow Admin to Enable/Disable to operate ALL6800. The details as listed in following screenshot. With the option changed, it will need to reboot system to activate.



File Access Cache



File Access Cache is default **Enable**. This option will help to increase the performance while single client access share folder in writing under SMB/CIFS protocol.

Samba Recycle Bin

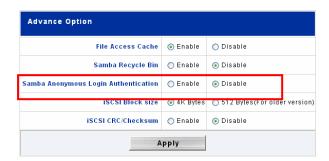


The ALL6800 is supported recycle bin via SMB/CIFS protocol. Simply enable it then all of deleted files/folders will reside in the ".recycle" folder with hidden attribution in each share.



In general, Windows has default to invisible all of hidden folders/files. So please enable this option to view ".recycle" folder.

Samba Anonymous Login Authentication



To enable this option, no matter there is share folder has been created in public access. The user account and password is needed from system to access under SMB/CIFS protocol. On the other hand, no more anonymous log Advance Option

iSCSI Block Size



Select the block size with 4K while the iSCSI volume size is over 2TB.

iSCSI CRC/Checksum



To enable this option, the initiator can connect with "Data digest" and "Header digest" enabled.

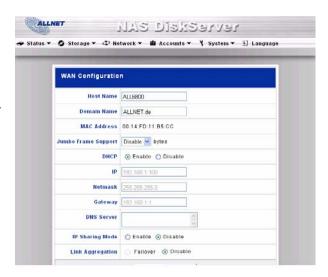


Network Management

Use the **Network** menu to make network configuration settings as well as service support settings.

WAN Configuration

From the **Network** menu, choose *WAN*, and the **WAN Configuration** screen appears.
This screen displays the network parameters of the WAN connection. You may change any of these items and press *Apply* to confirm your settings. See a description of each item in the following table:



WAN Configuration	
Item	Description
Host name	Host name that identifies the ALL6800 on the network.
Domain name	Specifies the domain name of the ALL6800.
MAC Address	MAC address of the network interface.
Jumbo Frame Support	Enable or disable Jumbo Frame Support of the WAN interface on your ALL6800.
DHCP	Enable or disable the ALL6800 from obtaining in IP address via DHCP server. If you require a static IP, disable this feature and input your network configuration.
IP	IP address of the WAN interface.
Netmask	Network mask, which is generally: 255.255.255.0
Gateway	Default Gateway IP address.
DNS Server	Domain Name Service (DNS) server IP address.
IP Sharing Mode	When enabled, PCs connected to the LAN port will be able to access the WAN. Default is Enabled.

Link Aggregation	Specifies whether WAN and LAN ports will be aggregated and
(ALL6800 only)	act as one port.
	Failover: When one port fails, the other one will take over.
	Load Balance: Ethernet traffic will flow alternative between two
	Ethernet ports.
	802.3ad: Linkage two Ethernet ports in parallel to increase
	throughput.

NOTE

- Only use Jumbo Frame settings when operating in a Gigabit environment where all other clients have Jumbo Frame Setting enabled
- Enabling DHCP automatically turns on UPnP— see the Service Support Screen.
- If you are only using the WAN port, we suggest that you disable IP Sharing Mode. This will result in higher throughput.
- A correct DNS setting is vital to networks services, such as SMTP and NTP.
- To use the Link Aggregation with "802.3ad selected" feature, please make sure the networking equipment on the other end of Ethernet cable also supports 802.3ad protocol.

WARNING

Most Fast Ethernet (10/100) Switches/Routers do not support Jumbo Frame and you will not be able to connect to your ALL6800 after Jumbo Frame is turned on. If this happens, turn off the ALL6800. Then, power on the ALL6800 and immediately press and hold the Reset button on the back of the unit for 10 seconds. This will reset your network settings, password, and turn off Jumbo Frame Support.

LAN Configuration

The ALL6800 supports two Gigabit Ethernet ports for higher service availability. To configure these ports, choose *LAN* from the **Network** menu, and the **LAN Configuration** screen appears. Press *Apply* to save your changes.



LAN Configuration	
Item	Description
MAC Address	Displays the MAC address of the LAN interface.
IP	Specifies the IP address of the LAN interface.
Netmask	Specifies the Network Mask of the LAN interface.
Jumbo Frame Support	Enable or disable Jumbo Frame Support on the LAN interface.

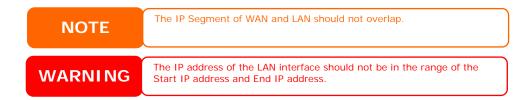
NOTE

Before enabling Jumbo Frame Support, please make sure your network equipment supports Jumbo Frame. If your equipment is incompatible, you might not be able to connect to your ALL6800. In this case, you have to reset the system back to default by the holding down front panel reset button for 5 seconds during boot up *process*.

DHCP Configuration

A DHCP server can be configured to assign IP addresses to devices connected to the LAN port. To configure these ports, choose *LAN* from the **Network** menu.

DHCP Configurati	ion
Item	Description
DHCP Server	Enable or disable the DHCP server to automatically assign IP address to PCs connected to the LAN interface.
Start IP	Specifies the starting IP address of the DHCP range.
End IP	Specifies the ending IP address of the DHCP range.
DNS Server	Displayed the DNS server IP address.



Web Services Configuration

From the **Network** menu, choose the **Service** item, and the **Web Service** screen appears. This screen displays the service support parameters of the system. You can change any of these items and press **Apply** to confirm your settings. A description of each item follows:



NOTE

- Disable HTTP support and Enable Secure HTTP support to guarantee secure access.
- In some environments, due to security concerns, you may wish to disable SMB/CIFS as a precaution against computer viruses.

Web Service	
Item	Description
HTTP (WebDisk)	Enable or disable WebDisk support. Enter the port number if this
Support	option is enabled. The port number
HTTPs (Secure	Enable or disable secure WebDisk support. Enter the port if this
WebDisk) Support	option is enabled.
SMB/CIFS	Enable or Disable SMB/CIFS protocol for Windows, Apple, Unix
	drive mapping.
UPnP	Enable or disable Universal Plug and Play protocol. UPnP helps to
	find the IP address of the ALL6800.

AFP (Apple Network Setup)

From the **Network** menu, choose the **AFP** item, and the **AFP Configuration** screen appears. This screen displays the configuration items for the Apple Filing Protocol. You can change any of these items and press **Apply** to confirm your settings. A description of each item follows:



Apple Network Configuration	
Item	Description
AFP Server	Enable or disable Apple File Service to use the ALL6800 with MAC OS-based systems.
Zone	Specifies Zone for Applet Talk service. If your AppleTalk network uses extended networks and is assigned with multiple zones, assign a zone name to the ALL6800. If you do not want to assign a network zone, enter an asterisk (*) to use the default setting.

NFS Setup

From the **Network** menu, choose the **NFS** item, and the **NFS Server Setting** screen appears. The ALL6800 can act as an NFS server, enabling users to download and upload files with the favorite NFS clients. Press **Apply** to confirm your settings. A description of each item follows:



NFS Server Setting	
Item	Description
NFS	Enable or Disable NFS support.
Apply	Click <i>Apply</i> to save your changes.
Cancel	Click <i>Cancel</i> to abandon your changes.

User and Group Management

The ALL6800 has built-in user database that allows administrators to manage user access using different group policies. From the **Accounts** menu, you can create, modify, and delete users, and assign them to groups that you designate.

Local User Configuration

From the **Accounts** menu, choose the **Users** item, and the **Local User Configuration** screen appears. This screen allows you to **Add**, **Modify**, and **Delete** local users.



Local User Configuration	
Item	Description
Add	Press the <i>Add</i> button to add a user to the list of local users.
Modify	Press the <i>Modify</i> button to modify a local user.
Delete	Press the Delete button to delete a selected user from the system.

Adding Users

- Click on the Add button on Local User Configuration screen, and Local User Setting screen appears.
- 2. On the **Local User Setting** screen, enter a name in the **User Name** box.
- 3. Enter a **User ID** number. If left blank, the system will automatically assign one.
- 4. Enter a password in the **Password** box and re-enter the password in the **Confirm** box.



- 5. Select which group the user will belong to. **Group Members** is a list of groups this user belongs to. **Group List** is a list of groups this user does not belong to. Use the << or >> buttons to have this user join or leave a group.
- 6. Press the *Apply* button and the user is created.

NOTE

All users are automatically assigned to the 'users' group.

Modifying Users

- 1. Select an existing user from the **Local User Configuration** screen.
- 2. Click on the *Modify* button, and **Local User Setting** screen appears.
- 3. From here, you can enter a new password and re-enter to confirm, or use the << or >> buttons to have this user join or leave a group. Click the *Apply* button to save your changes.

Deleting Users

- 1. Select an existing user from the **Local User Configuration** screen.
- 2. Click on *Delete* button and the user is deleted from the system.

Local Groups Configuration

From the **Accounts** menu, choose the **Groups** item, and the **Local Groups Configuration** screen appears. This screen allows you to **Add**, **Modify**, and **Delete** local groups.



Local Groups Configuration	
Item	Description
Add	Press the <i>Add</i> button to add a user to the list of local groups.
Modify	Press the <i>Modify</i> button to delete a selected group from the system.
Delete	Press the Delete button to delete a selected group from the system.

Adding Groups

- On the Local Group Configuration screen, click on the Add button.
- 2. The **Local Group Setting** screen appears.
- 3. Enter a Group Name.
- 4. Enter a **Group ID** number. If left blank, the system will automatically assign one.



- 5. Select users to be in this group from the **Users List** by adding them to the **Members List** using the << button.
- 6. Click the Apply button to save your changes.

Modifying Groups

- On the Local Group Configuration screen, select a group name from the list
- 2. Press the *Modify* button to modify the members in a group.
- 3. To add a user into a group, select the user from the **Users List**, and press the << button to move the user into the **Members List**.
- 4. To remove a user from a group, select the user from **Members List**, and press the >> button.
- 5. Click the *Apply* button to save your changes.

Deleting Groups

- On the Local Group Configuration screen, select a group name from the list
- 2. Press *Delete* to delete the group from the system.

Batch User and Group Creation

The ALL6800 can also add users and groups in batch mode. This enables you to conveniently add numerous users and groups automatically by importing a simple comma-separated plain text (*.txt) file.

From the **Accounts** menu, click **Batch Mgmt** and the **Batch Create Users and Groups dialogue** will appear. To import your list of users and groups, follow these steps:

Click **Browse...** to locate your comma-separated text file.

The information in the text file should follow this format:

[USERNAME], [PASSWORD], [GROUP]

- 2. Click Open.
- 3. Click *Import* to begin the user list import.

ADS/NT Configuration

If you have a Windows Active Directory Server (ADS) or Windows NT server to handle the domain security in your network, you can simply enable the ADS/NT support feature; the ALL6800 will connect with the ADS/NT server and get all the information of the domain users and groups automatically. From the **Accounts** menu, choose



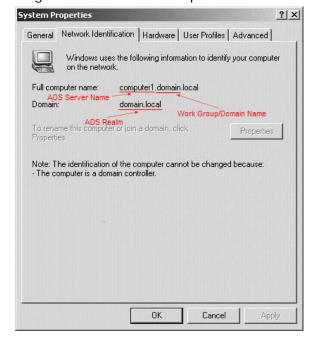


Authentication item and the **ADS/NT Support** screen appears. You can to change any of these items and press **Apply** to confirm your settings. A description of each item follows:

ADS/NT Support	
Item	Description
WINS Server	Specifies the WINS server if necessary.
Work Group / Domain Name	Specifies the SMB/CIFS Work Group / ADS Domain Name (e.g. ALL6800).
ADS/NT Support	Select Disable to disable authentication through Windows Active Directory Server or Windows NT.
Authentication Method	Select ADS for Windows Active Directory Server, or select NT for Windows NT
ADS/NT Server Name	Specifies the ADS/NT server name (e.g. adservername).
ADS/NT Realm	Specifies the ADS/NT realm (e.g. example.com).
Administrator ID	Enter the administrators ID of Windows Active Directory or Windows NT, which is required for ALL6800 to join domain.
Administrator	Enter the ADS/NT Administrator password.
Password	
Confirm Password	For re-entering password to confirm.

To join an AD domain, you can refer the figure and use the example below to

configure the ALL6800 for associated filed input:



AD Domain Example	
Item	Information
Work Group / Domain	domain
Name	
ADS Support	Enable
ADS Server Name	Computer1
ADS/NT Realm	Domain.local
Administrator ID	Administrator
Administrator	******
Password	
Confirm Password	******

NOTE

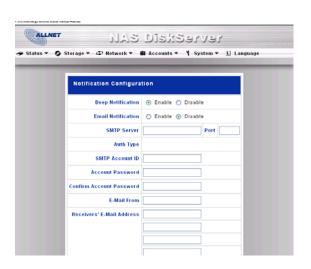
- The DNS server specified in the WAN configuration page should be able to correctly resolve the ADS server name.
- The time zone setting between ALL6800 and ADS should be identical.
- The system time difference between ALL6800 and ADS should be less than five minutes.
- The Administrator Password field is for the password of ADS (Active Directory Server) not ALL6800.

System Settings

The **System** menu gives you a wealth of settings that you can use to configure your ALL6800's system administration functions. You can set up system notifications, view system logs, and even upgrade firmware from this menu.

System Notifications

From the **System** menu, choose the **Notification** item, and the **Notification Configuration** screen appears. This screen lets you have the ALL6800 notify you in case of any system malfunction. Press **Apply** to confirm all settings. See following table for a detailed description of each item.



NOTE

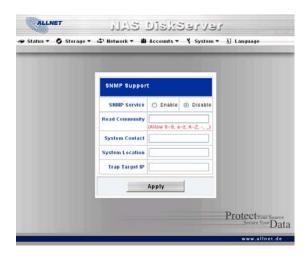
Consult with your mail server administrator for email server information.

Notification Configuration	
Item	Description
Beep Notification	Enable or disable the system beeper that beeps when a problem
	occurs.
Email Notification	Enable or disable email notifications of system problems.
SMTP Server	Specifies the hostname/IP address of the SMTP server.
Port	Specifies the port to send outgoing notification emails.
Auth Type	Select the SMTP Server account authentication type.
SMTP Account ID	Set the SMTP Server Email account ID.
Account Password	Enter a new password.
Confirm Account	Confirm a new password.
Password	·
Receiver's E-mail	Add one or more recipient's email addresses to receive email

Address	notifications.
Test E-Mail	Click to send out a test e-mail to make sure the settings are
	correct.

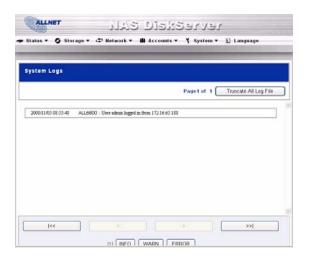
SNMP

From the **System** menu, choose the **SNMP** item and the **SNMP Supports** screen appears. You could enable the SNMP function and filled in the related information in each fields. With the SNMP management software could get system basic information.



System Logs

From the **System** menu, choose the **Logs** item and the **System Logs** screen appears. This screen shows a history of system usage and important events such as disk status, network information, and system booting. See the following table for a detailed description of each item:



System Logs	
Item	Description
Truncate All Log File	Clear all log files.
<< < > >>	Use the forward (> >>) and backward (<< <) buttons
	to browse the log pages.
INFO	Provides all log information including warning messages and
	error messages.
WARN	Shows all warning messages and error messages.
ERROR	Shows only error messages.
GO	Specify the number of lines per page and press Go.
Ascending	Shows logs by date in ascending order.
Descending	Shows logs by date in descending order.
Download All Log File	Export all logs to an external file.

Time and Date Settings

From the **System** menu, choose the **Time** item and the **Time** screen appears. Set the desired **Date**, **Time**, and **Time Zone**. You can also elect to synchronize the system time on the ALL6800 with an **NTP** (**Network Time Protocol**) **Server**. You can change any of these items and press **Apply** to confirm your settings.

See the following table for a detailed description of each item:



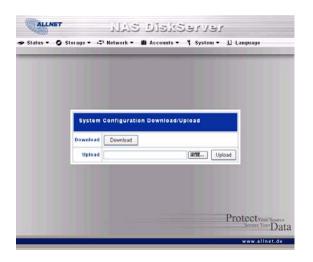
Time	
Item	Description
Date	Sets the system date.
Time	Sets the system time.
Time Zone	Sets the system time zone.
NTP Server	Select Yes to allow the ALL6800 to synchronize with the NTP server shown below. Select Manually to allow the ALL6800 to synchronize with an NTP server of your choice. Select No to not have the ALL6800 to synchronize with an NTP server.

WARNING

If an NTP server is selected, please make sure your ALL6800's network has been setup to access the NTP server.

System Configuration Backup and Restore

From the **System** menu, choose the *Config Mgmt* item and the **System Configuration Download/Upload** screen appears. From here, you can download or upload stored system configurations. See the following table for a detailed description of each item.



System Configuration Download/Upload	
Item	Description
Download	Save and export the current system configuration.
Upload	Import a saved configuration file to overwrite current system configuration.

NOTE

Backing up your system configuration is a great way to ensure that you can revert to a working configuration when you are experimenting with new system settings.

The system configuration you have backup can be only restore in same firmware version. And the backup details have excluded user/group accounts.

Module Management

From the **System** menu, choose the *Module Mgmt* item and the **Module Management** screen appears. From here, you can install separate software modules to extend the functionality of your ALL6800.



Module Management	
Item	Description
Name	Displays the name of the module.
Version	Displays the module version.
Description	The description of the module.
Enable	Displays whether the module has been enabled or not.
Status	Displays the status of the module.
Uninstall	Click to uninstall the module.
Enable/Disable	Click to enable a module.
Check Update	Click to look for updates for the selected module.
Module File	Location of the module file.
Browse	Click to browse the folder of your PC to locate the module files.
Install	Click to install the listed module into your ALL6800

NOTE

Modules can potentially harm your system. Only install modules from your vendor, or publishers you can trust.

Reset to Factory Default Settings

From the **System** menu, choose the *Factory Default* item and the **Reset to Factory Default** screen appears. Press *Apply* to reset the ALL6800 to factory default settings. Press *Cancel* to go back to the main menu.



WARNING

Resetting to factory defaults will not erase the data stored in the hard disks, but WILL revert all the settings to the factory default values.

Upgrading System Firmware

From the **System** menu, choose the *Firmware Upgrade* item and the *Firmware Upgrade* screen appears.

Follow the steps below to upgrade your firmware:

- 1. Use the *Browse* button to find the firmware file.
- 2. Press Apply.
- 3. The beeper beeps and the Busy LED blinks until the upgrade is complete.



NOTE

- The beeper only beeps if it is enabled in the System Notification menu.
- Check ALLNET website for the latest firmware release and release notes.

WARNING

Do NOT turn off the system during the firmware upgrade process. This will lead to a catastrophic result that may render the system inoperable.

Change Administrator Password

From the **System** menu, choose the **Administrator Password** item and the **Change Administrator Password** screen appears. Enter a new password in the **New Password** box and confirm your new password in the **Confirm Password** box. Press **Apply** to confirm password changes. See the following table for a detailed description of each item.



Change Administrator Password	
Item	Description
New Password	Type in a new administrator password.
Confirm Password	Type the new password again to confirm.
Apply	Press this to save your changes.

Reboot and Shutdown System

From the **System** menu, choose **Reboot & Shutdown** item, and the **Shutdown/Reboot System** screen appears. Press *Reboot* to restart the system or *Shutdown* to turn the system off.



Logout

To logout of the Web Administration Interface, navigate to *System* > *Logout*.

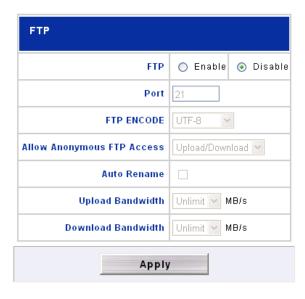
Chapter 5: Additional Feature Setup

Overview

The ALL6800 can also act as an FTP Server, allowing employees and clients to transfer files using their favorite FTP programs. The integrated Print Server allows you to share a single USB printer will all users on the network. The following section shows you how.

FTP Server

ALL6800 can act as a FTP server, enabling users to download and upload files with their favorite FTP programs. From the **Network** menu, choose the **FTP** item, and the **FTP** screen appears. You can change any of these items and press **Apply** to confirm your settings. A description of each item follows:



FTP		
Item	Description	
FTP	Enable FTP Service on the ALL6800.	
Port	Specifies the port number of an incoming connection on a non-standard port.	
FTP ENCODE	If your FTP client or operating system does not support Unicode (e.g. Windows® 95/98/ME or MAC OS9/8), select the same encoding as your OS here in order to properly view the files and directories on the server. Available options are BIG5, HZ, GB2312, GB18030, ISO, EUC-JP, SHIFT-JIS and UTF-8.	
Allow Anonymous FTP Access	Upload/Download: Allow anonymous FTP users to upload or download files to/from public folders. Download: Allow anonymous FTP users to download files from public folders. No access: Block anonymous FTP user access.	
Auto Rename	If checked, the system will automatically rename files that are uploaded with a duplicate file name. The renaming scheme is [filename].#, where # represents an integer.	
Upload Bandwidth	You may set the maximum bandwidth allocated to file uploads. Selections include Unlimited , 1, 2, 4, 8, 16 and 32 MB/s.	
Download Bandwidth	You may set the maximum bandwidth allocated to file downloads. Selections include Unlimited , 1, 2, 4, 8, 16 and 32 MB/s.	

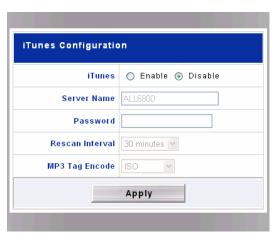
To access the share folder on the ALL6800, use the appropriate user login and password set up on the **Users** page (Accounts > Users). Access control to each share folder is set up on the **ACL** page (Storage > Folder > ACL).

iTunes® Server

With the built-in iTunes server capability, the ALL6800 enables digital music to be shared and played anywhere on the network!

From the **Network** menu, choose the *iTunes* item, and the **iTunes Configuration** screen appears. You may enable or disable the iTunes

Service from here. Once enabled, enter correct information for each field and press *Apply* to save your changes. See the following table for detailed descriptions of each field:



iTunes Configuratio	n
Item	Description
iTunes	Enable or disable the iTunes Service.
Server Name	Name used to identify the ALL6800 to iTunes clients.
Password	Enter password to control access to your iTunes music.
Rescan Interval	Rescan interval in seconds.
MP3 Tag Encode	Specify tag encoding for MP3 files stored in ALL6800. All ID3 tags will be sent out in UTF-8 format.

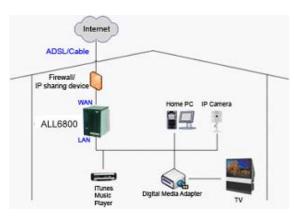
Once the iTunes service is enabled, the ALL6800 will make all music located in the **Music** folder available for iTunes-equipped computers on the network.

Media Server

With the built-in Media Server capability, the ALL6800 provides media streaming service to stand-alone networked home media adapters that support the UPnP AV protocol or are Digital Living Network Alliance (DLNA) standard compliant.

With the ALL6800's built-in media server capability, you can share digital media such as music, pictures, and movies with any compatible device throughout your entire home.

To configure the media server, under the Network menu, click Media Server and the Media Manager Settings window will appear. A description of each field follows:







Media Manager Settings		
Item	Description	
Media Server	Enable or disable the Media Server service.	
Shared Media Folders	Select the folder(s) that contains media files to be shared.	
Rescan	Click the <i>Rescan</i> button to have the ALL6800 for new contents	
	in the selected media folder.	

Adding Media Share Folders

Once the Media Server software is installed, you can start adding folders that contain the media that you would like to share. To create a media share folder, follow the steps below:

- 1. Click on **Network** > **Media Server** in the menu bar.
- 2. From the **Shared Media Folders** window, select the folder that contains your media files, and click its checkbox.
- 3. The contents in the folder will be scanned for the Media Server. The time required for scanning depends on the size of the folder.

Connecting DMAs to the Media Server

Next, it's time to connect your Digital Media Adapter (DMA) to the media server:

- 1. Connect your DMA to your Media Server
 - a. Configure your DMA to use a Dynamic IP address. The IP address will be assigned by the router.
 - b. Some DMAs are wireless enabled. You can connect the DMA to a wireless router. For instructions on how to connect your DMA to a wireless router, please refer to your DMA's user manual.
- 2. Connect your DMA's video output to video input of your TV set.
- 3. Turn on the TV and change the video signal input to DMA.
- 4. Setup the DMA (These steps will be different if you use a different DMA)
 - a. From the Server List screen, select "ALL6800:Mediabolic Server" as the server.
 - b. Go to My Media
 - c. Click on the **Up/Down Arrow** buttons to select **Music Jukebox**, **Photo Albums**, or **Video Clips**
 - d. Start enjoying the contents stored in your ALL6800.

Printer Server

You can configure the ALL6800 to act as a printer server. That way, all PCs connected to the network can utilize the same printer.

Printer Information Manufacture N/A Model N/A Status No Printer Detected Remove document from queue Restart printer service Restart

Windows XP SP2

To set up the Printer Server in Windows XP SP2, follow the steps below:

- 1. Connect the USB printer to one of the USB ports (preferably the rear USB ports; front USB ports can be used for external HDD enclosures).
- 2. Go to Start > Printers and Faxes.
- 3. Click on File > Add Printer.
- 4. The Add Printer Wizard appears on your screen. Click Next.
- 5. Select the "A network printer, or a printer attached to another computer" option.
- 6. Select "Connect to a printer on the Internet or on a home or office network", and enter "http://ALL6800_IP_ADDRESS:631/printers/usb-printer" into the URL field.
- 7. Your Windows system will ask you to install drivers for your printer. Select correct driver for your printer.
- 8. Your Windows system will ask you if you want to set this printer as "Default Printer". Select **Yes** and all your print jobs will be submitted to this printer by default. Click **Next**.
- 9. Click Finish.

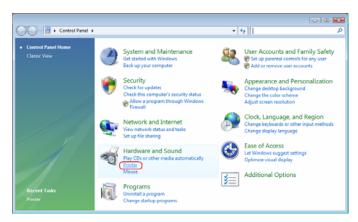
NOTE

- Not all USB printers are supported. Please check ALLNET website for a list of supported printers.
- Note that if a multi-function (all-in-one) printer is attached to the ALL6800, usually only the printing and fax functions will work. Other features, such as scanning, will probably not function.

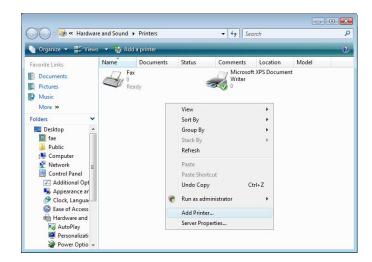
Windows Vista

To set up the Printer Server in Windows Vista, follow the steps below:

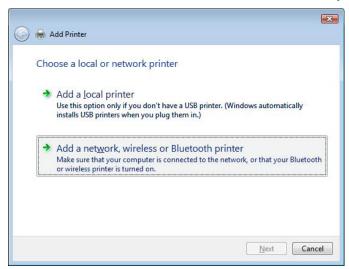
1. Open *Printer Folder* from the **Control Panel**.



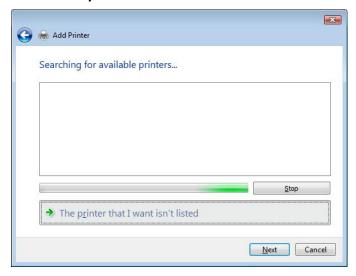
2. Click the right mouse button in anywhere on the **Printers** folder and then select **Add Printer**.



3. Select Add a network, wireless or Bluetooth printer.

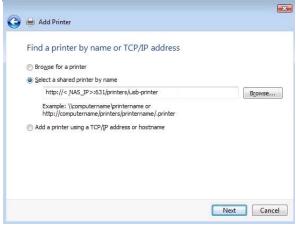


4. Select The printer that I want isn't listed.



You can press *The printer that I want isn't listed* to go into next page without waiting for **Searching for available printers** to finish.

5. Click Select a shared printer by name.



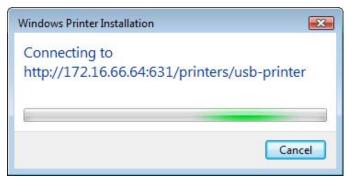
Type http://<allnet_NAS>:631/printers/usb-printer in the box, where <allnet_NAS_IP> is the IP address of the ALL6800. Click **Next**.

6. Select or install a printer and then press **OK**.



If your printer model is not listed, please contact your printer manufacturer for help.

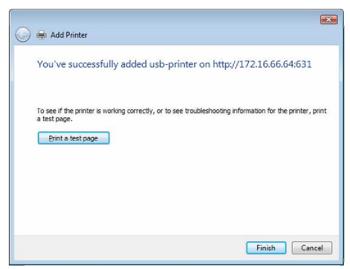
7. Windows will attempt to connect to the printer.



8. You can choose to set this printer as the default printer by checking the **Set as the default printer** box. Click **Next** to continue.



9. Done! Click Finish.



Download Manager

With the built-in Download Manager, you can have the ALL6800 download HTTP, FTP, and BT files without having full PC powered on. What's more, you can even schedule your downloads for off-peak hours, ensuring efficient use of bandwidth. To access the Download Manager, go to **Network**, choose the **Download Manager** option, and the **Download Tasks** and **Download Schedule** windows appear.

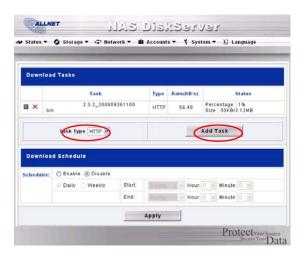


Download Tasks	
Item	Description
	Click to start the specified task.
11	Click to pause the specified task.
×	Click to delete the specified task. A prompt will appear asking you if you would like to delete the task itself, or the task and all related downloaded files.
Task	Name of the task. Click to see more information about this task.
Туре	Type of transfer. Can be HTTP, FTP, or BT.
Rate	Transfer rate of the task in kilobytes per second (KB/s). DL: Download rate UL: Upload rate Status of the task
Status	Status of the task. Complete: Percentage complete (%) Completed / Total download size
Task Type	Use this dropdown to select the type of transfer. HTTP , FTP , and BT are available.
Add Task	Click to add the kind of task specified beside "Task Type".
Enable Refresh	Click to refresh the task list.

Adding an HTTP Task

To add a new HTTP task to the Download Manager, follow these steps:

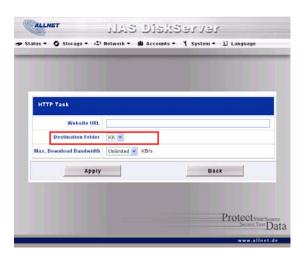
1. Using the **Task Type** dropdown, select *HTTP* and click *Add Task*.



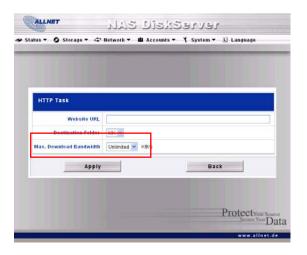
2. In the **HTTP Task** window, start by inputting the target URL in the **Website URL** box. This is the link to the download you want to queue.



3. Next, select the destination folder from the **Destination Folder** dropdown. This is where the download will reside.



4. Select the maximum download bandwidth from the **Max. Download Bandwidth** dropdown.



5. Press *Apply* to add the task.

6. Once added, your download will appear in the list of download tasks. To start the download, simply click the **Start** icon (▶) and the download will begin.



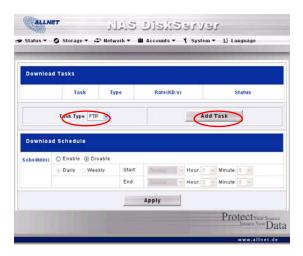
7. The download status will continually update in the **Download Tasks** window. To pause the download, click the **Pause** icon (...).



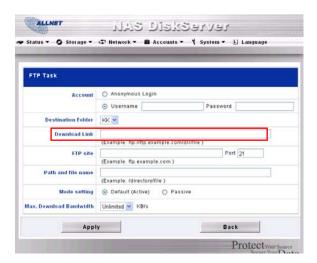
Adding an FTP Task

To add a new FTP task to the Download Manager, follow these steps:

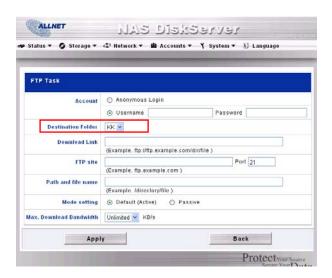
1. Using the **Task Type** dropdown, select *FTP* and click *Add Task*.



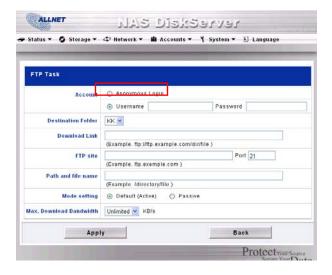
2. In the **FTP Task** window, start by inputting the target URL in the **FTP File** box. This is the link to the download you want to queue.



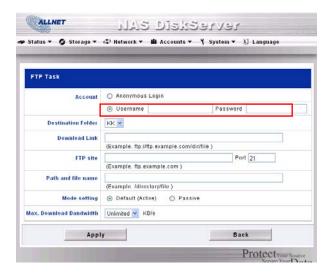
3. Next, select the destination folder from the **Destination Folder** dropdown. This is where the download will reside.



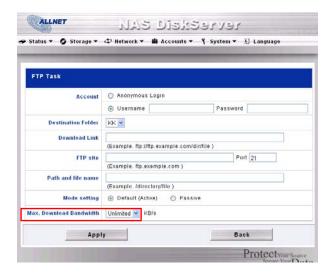
4. The next step depends if you are using an anonymous login for your FTP download. If you are logging in anonymously, select *Anonymous Login* and move on to step 5.



If you are required to login with a user name and password, select **Username** and input your user name and password into the appropriate fields.



5. Select the maximum download bandwidth from the **Max. Download Bandwidth** dropdown.

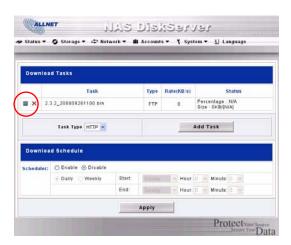


6. Press Apply to add the task.

7. Once added, your download will appear in the list of download tasks. To start the download, simply click the **Start** icon (>) and the download will begin.



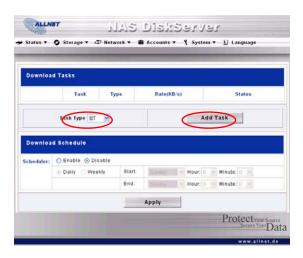
8. The download status will continually update in the **Download Tasks** window. To pause the download, click the **Pause** icon ().



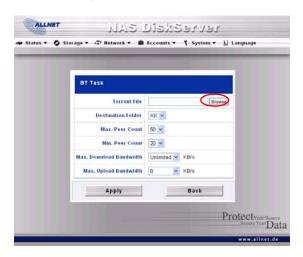
Adding a BT Task

To add a new BT task to the Download Manager, follow these steps:

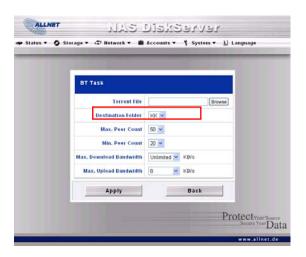
1. Using the **Task Type** dropdown, select **BT** and click **Add Task**.



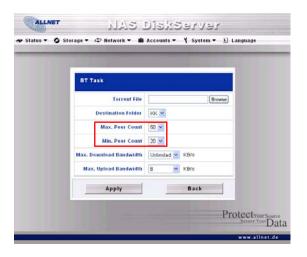
2. In the **BT Task** window, start by clicking **Browse...** and selecting the torrent file you wish to start.



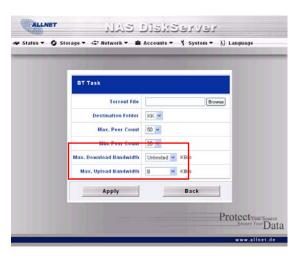
3. Next, select the destination folder from the **Destination Folder** dropdown. This is where the download will reside.



4. Next, you can select the maximum and minimum number of peers from selecting the counts from the appropriate dropdowns.



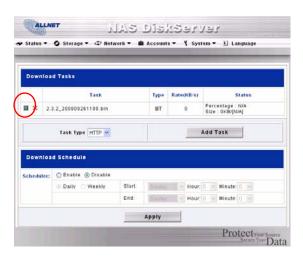
5. Next, you can set the maximum download and upload bandwidths from the dropdowns below.



- 6. Press *Apply* to add the task.
- 7. Once added, your download will appear in the list of download tasks. To start the download, simply click the **Start** icon (>) and the download will begin.



8. The download status will continually update in the Download Tasks window. To pause the download, click the **Pause** icon ().



Deleting Tasks

To delete a task, simply follow the steps below:

- 1. Click the delete icon (X) beside the task that you wish to delete. The **Delete Task** dialogue box will appear.
- 2. Select **Delete Task only** if you wish to remove only the torrent file and all transient files, leaving the unfinished download files intact.
- 3. Select **Delete Task and Files** if you wish to remove the torrent file and all transient files, and the unfinished download files.
- 4. Click **OK** to delete the task. Click **Cancel** to return to the **Download Manager**.

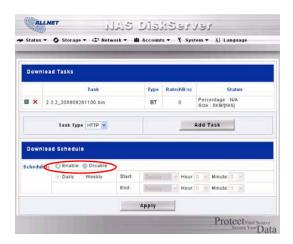
Scheduling Downloads

With the Download Manager, you can schedule your downloads to begin at different times of the day. This is useful if you wish to complete your downloads during off-peak hours, reserving your bandwidth for other applications. A table describing the Download Schedule window appears below:

Download Schedule		
Item	Description	
Scheduler	Enable or disable the Download Scheduler.	
Daily/Weekly	Choose to have the Download Scheduler activate on a daily or weekly basis.	
Start: Day/Hour /Minute	Specify the start day/hour/minute for the download task.	
End: Day/Hour/Minute	Specify the end day/hour/minute for the download task.	

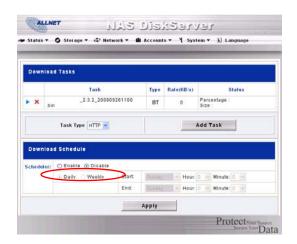
To schedule downloads, follow these steps:

1. Under Download Schedule, set Scheduler to Enable.



2. To schedule a daily download period, select *Daily* and select a start time and end time.

To schedule a weekly download period, select *Weekly* and select a start day/time and end time/day.



3. Click Apply to save your changes.



Chapter 6: Using the ALL6800

Overview

Once the ALL6800 is setup and operating, users on the network may manage all varieties of digital music, photos, or files by simply using their web browsers. To manage your personal files or access public files on the ALL6800, just enter its IP address into your browser (default IP address is http://192.168.1.100), and you will be taken to the **ALL6800 Login** page.

NOTE

Before proceeding, make sure that WebDisk Support or Secure WebDisk Support is enabled in the Service Support screen in the system's **Network** menu. See Service Support in Chapter 4: System Management > Network Management > Web Services Configuration.

Login Page

To login to the system, enter your user name and password, and select Web Disk or Photo server then click *Login* to log into the system. You will be taken to the **selected** interface.



Using WebDisk

The ALL6800 provides a WebDisk function that allows you to access the system over the Internet from any browser.

- 1. In the Login page, type in the User ID and password that were previously set for you in the Accounts menu. See **Chapter 4: System Management** > **User and Group Management** > **Local User Configuration**.
- 2. The WebDisk page appears showing folders made currently available to you via the **Access Control List (ACL)**.
- 3. Click on a folder name to enter the folder.
- 4. The folder's page appears displaying files and folders. Click on a file to download the file.

Folder Page	
Item	Description
Name	Displays the names of folders and files.
Size	Shows the size of folders and files.
Type	Displays the type of folders and files.
Modified Date	Shows the time of most recent modification of folders and files.

5. Buttons on the folder page allow you to create a new folder, upload files and delete files in the folder.

Folder Page Buttons		
Button	Description	
Up	Goes to the previous folder level.	
New folder	Creates a new folder.	
New file (upload)	Uploads a file from your computer to the current folder.	
Delete Selected Items	Deletes selected files and folders.	

- 6. To create a new folder within the current folder, press the New folder button. When the screen appears enter a name for the folder. Press OK to create the folder.
- 7. To upload a file from your computer to the current folder, press the New file (upload) button. When the screen appears, press Browse and locate the file to upload. Press **OK** and the file is uploaded to the current folder.
- 8. To delete a file or folder, select the file or folder's check box. Press the Delete selected items button. You can also check the check box as the red circle indicates to select all files and folders in this folder.

To access folders with access control, you must first login with a local user account.

For more information on how to setup user rights to the folders, please check Chapter 4: System Management > Folder Management > Folder Access Control List (ACL).

Photo Server

Using the Photo Server, users can view and share photos, and even create their own albums right on the ALL6800.

You will see your own Photo Gallery and all public Photo Albums on the network.

To manage any picture files, you must first select the item by clicking the box.



Windows XP Publishing Wizard

There are many ways for a local user to upload pictures into their photo album. Users of Windows XP can upload their pictures using the Windows XP Publishing Wizard.

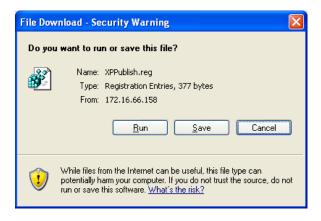
1. Click on the XP Publishing Wizard icon on top right corner



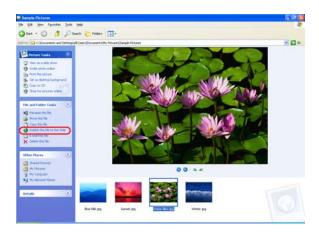
2. The **XP Web Publishing Wizard Client** screen appears. Click on the link to install the Publishing Wizard.



3. Windows XP will ask whether you want to run or save this file. Click Save to save the register file. .



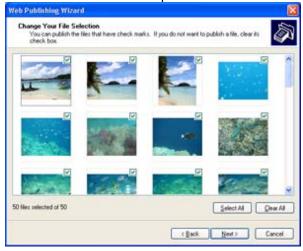
4. Once the register file is installed, use the Windows file manager to browse the folder that contains the picture you want to publish. On the left pane, there will be an icon labeled "**Publish this folder to the Web**".



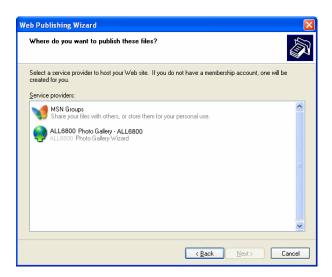
5. Click on this icon and **Web Publishing Wizard** will start.



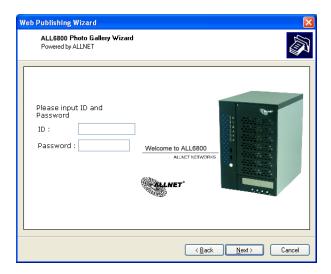
6. Select the pictures you want to publish to the Photo Web Server by placing a check mark on the top left hand corner of the picture. Click *Next*.



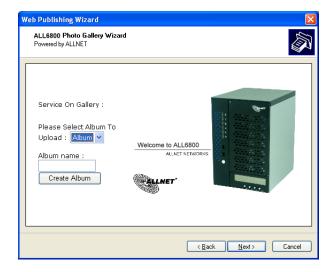
- 7. Your PC will start to connect to the Photo Web Server.
- 8. Select **ALL6800 Photo Gallery Wizard** to publish your pictures to the ALL6800.



9. Login into the ALL6800 with your local user name and password.



10. Create your album by entering an album name and clicking on the **Create Album** button.

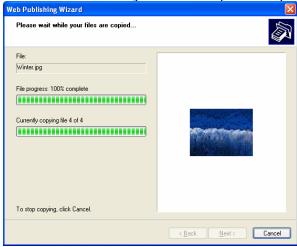


11. Select the album you want to upload your pictures to.

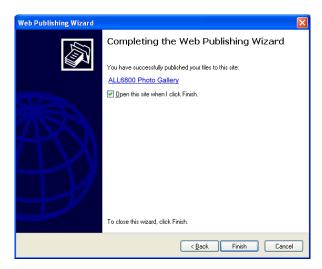




13. Windows will show you that the picture upload is in progress.



14. When the upload is finished, the Wizard will ask you whether if you want to go to the website. Click *Finish* to go to your Photo Web Server.



15. Click on the user's icon to go to that user's album.



16. You will see the user's album list. Click on Album.



17. Finished! You will see the pictures just selected in the album.



Managing Albums and Photos

Photo		
Icon	Function	Description
Cover	Make Cover	Make selected photo your cover picture.
<u></u>	Back	Return to the previous screen.
(.)	Add	Add a new album or photos.
. <u>./.</u>	Modify	Edit the name and description of the selected album or photo. Each name is limited to 20 characters and each description is limited to 255 characters.
(X)	Delete	Delete the selected albums or photos.

NOTE

- Only logged in users will see these icons. To prevent system errors, the ALL6800 sets the following limitations on photo files:

 - Each file upload is limited to a size of 4MB. Files exceeding 4MB will NOT be uploaded and no error message will appear.
 Only these photo file types will be uploaded: *.jpg, *.gif, *.bmp, *.png, *.pcx, *.psd, *.bmp.
 If duplicate file names exist during upload process, system will add a number in front of the original file name (abc → 1abc).

Creating Albums

To create a photo album, follow the steps below:

- 1. Click the **Add** button to create a new album.
- 2. Enter a name for the album, and enter a description if you wish. Then, click on the *Create Album* button.

Password Protecting Albums

If you would like to put a password on a particular album, follow these steps:

- 1. Select the album to be protected, click on the *Edit* button, and the *Album Edit* screen will appear.
- 2. The owner of the album can enter an album password to protect the album, so that only people with the correct password can view the album.

Uploading Pictures to Albums

Uploading pictures to albums using the Web User Interface is easy:

- 1. When the album is created, click the album icon to enter the album. Initially the album is empty.
- 2. Click the *Add* button to upload pictures into the album. The **Upload Photos** screen will appear. Users can select and upload up to 8 pictures at a time.
- 3. Once the picture is uploaded, you can view it in the album. The owner of the album can delete or modify the pictures with the *Delete* or *Modify* buttons on the top right hand corner

EXIF Information

While viewing pictures, you can also have the ALL6800 display the EXIF information for each photo.



Simply click the *EXIF* button to display EXIF information. To hide this information, click the *EXIF* button again.

Slide Shows

Slide shows are a great way to enjoy pictures stored on your ALL6800.

You can click on the *Start Slide Show* icon on the top right hand corner to start the slide show.



To stop the slide show, click on the *Stop Slide Show* icon on the top right hand corner.

Mapping a Client PC to the ALL6800

You can map share folders on the ALL6800 so that you can access them as if they were drives on your computer. You can connect to the shared network folders on the ALL6800 as follows:

Windows

- 1. Go to the **My Computer** folder in Windows.
- 2. In the menu bar, select Tools and then Map Network Drive...
- 3. The Map Network Drive window appears.
- 4. Assign a drive letter for the share folder.
- 5. Click the *Browse* button to find the folder over your network. Alternatively, you may enter the folder name you wish to connect to or enter its IP address. (i.e. \\192.168.1.100\share)
- 6. Click *Finish*. When the **Connect As...** window appears, enter your user name and password.
- 7. Click **OK**. The share folder appears as the drive you assigned. You can now access this folder as though it were a drive on your computer.

Apple OS X

On an Apple computer, you can connect to shared computers and servers using a network address.

- 1. Choose Go > Connect to Server...
- Enter the network address for the server in the Server Address text box. When connecting using SMB/CIFS protocol, type: smb://192.168.1.100/Folder1
 When connecting using AFP protocol, type:

afp://192.168.1.100/Folder1

Click Connect.

- 3. When MAC OS X is trying to connect ALL6800, it will ask for a User Name and Password which has access to the folder.
- 4. When MAC OS X has connected to the ALL6800 successfully, an icon representing the folder will appear on the MAC OS X desktop. You can access the folder by double clicking on the icon.

Mapping the ALL6800 as an iSCSI Drive

With the ALL6800, you are able to map it as an iSCSI drive. With iSCSI, you can remotely access the ALL6800 at great speeds, as if it were installed as a local drive in your computer.

To do this, simply follow the steps below:

Windows 2000/XP

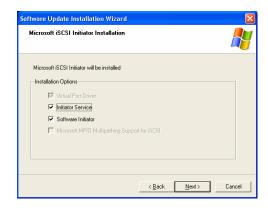
- First, download the iSCSI Initiator from the Microsoft website (http://www.microsoft.com). You can find this software by entering iSCSI Initiator into the search box on their homepage.
- 2. Once the download is complete, install the iSCSI Initiator by double-clicking the EXE file. You may be presented with the following security warning. Click *Run* to continue.



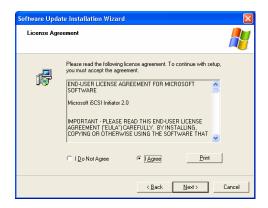
3. You will now install the iSCSI Initiator using the Setup Wizard. Click **Next** to continue.



4. Leave the default selections and click Next.



5. Read the license agreement. To continue with the installation, click *I Agree* and then click *Next*.



6. The iSCSI Initiator will now install automatically. Click *Finish* once completed.



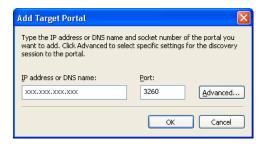
7. Start the iSCSI Initiator by double-clicking its icon on the desktop. The iSCSI Initiator properties window will appear.



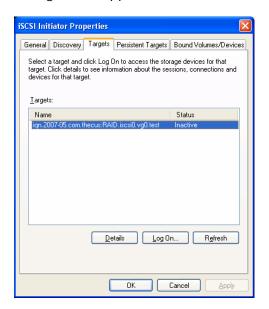
8. Select the *Discovery* tab. Under Target Portals, click *Add*.



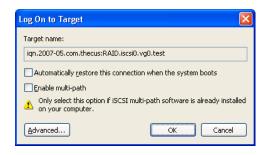
9. Enter the IP address of the ALL6800. Click *OK*.



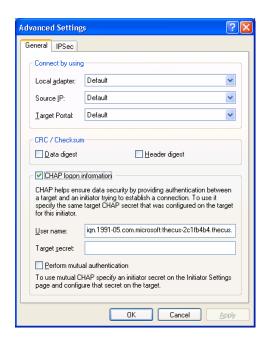
10. On the **iSCSI Initiator Properties** window, select the *Targets* tab. With the iSCSI target highlighted, click *Log On*. The *Log On to Target* dialogue will appear.



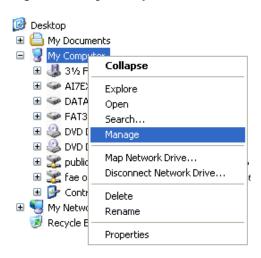
11. If you have not enabled CHAP, click \emph{OK} to continue.



If you have enabled CHAP, click *Advanced*. Under Advanced Settings, check the **CHAP login information** checkbox and enter your username and password. Click *OK*.



12. Right click *My Computer* on the desktop and select *Manage*.



13. Click on Disk Management and you will see a new hard disk listed.



14. Initialize the new hard disk and you will then be able to use the iSCSI target as a local drive.

Windows Vista

Because Windows Vista has the Microsoft iSCSI Initiator pre-installed, you will not have to install this piece of software. Instead, start the iSCSI Initiator and follow steps 8-14 to map the ALL6800 as an iSCSI drive.

File Backup

There are a number of ways to back up data with the ALL6800.

Nsync

You can backup a share folder to another ALL6800 (Nsync Target) or any FTP server for safe keeping as long as you have appropriate access right on that target. When using Nsync between two ALL6800s, you have the option to transmit files securely between two ALL6800s.

If the files on your ALL6800 are lost for any reason, you can restore those files from the target ALL6800. To backup files regularly, you can set up a scheduled task to run only once, daily, weekly, or monthly. You can also limit the bandwidth of your Nsync tasks, so other users on the network can share the bandwidth equally.

Under the **Storage** menu, click **Nsync** and the **Nsync** window appears. Below is a description of each field:

Nsync	
Item	Description
Task name	The name of your Nsync task.
Server	The IP address of your target server
Share folder	The share folder you would want to backup.
Last Time	The time when the last Nsync task was executed.
Last Status	The status of your last Nsync task.
Action	Administrator can run or stop an Nsync task by pressing the
	action button.
Bandwidth Setting	Bandwidth control on Nsync tasks.
Add	Click to add a Nsync task
Modify	Click to modify an Nsync task.
Restore	Restore share folder from an Nsync target.
Delete	Click to delete an Nsync task. Backup files on Nsync target is
	also deleted.

Adding an Nsync Task

From the **Nsync Information** screen, click **Add** to display the **Add Nsync Task** screen.

Add Nsync Task	
Item	Description
Task Name	The name of your Nsync task.
Manufacturer	Select whether the target is a ALLNET Product (e.g. ALL6800) or
	FTP server.
Target Server IP	The IP address of your target server.
Address	
Source Folder	The share folder you want to backup.
Nsync Task Name	The name of your Nsync task.
Authorized Username	The account name on the target server.
on Target Server	

Password on Target Server	The password for the username on the target server.
Test Connection	Click to check the connection to the Target Server.
Schedule	Schedule backup of your share folders.
Time	The time when the Nsync task will run.
Туре	Select whether to run the Nsync task daily, weekly, or monthly. Daily: input the time of day to execute Nsync task. Weekly: input which day of the week to execute the task. Monthly: decide which day of the month to execute the task.
Apply	Click to submit the task.

NOTE

Before starting an Nsync Task, make sure the target server's Nsync Server (or FTP Server) is enabled.

Setting Up an Nsync Target on an Nsync Device

On the Nsync target server, the administrator of that server has to set up a user account with a folder named "nsync" and grant write access.

- On the Nsync server, add a user for Nsync source (ex. nsyncsource1). For instructions on how to add a user on the ALL6800, see Chapter 4:
 System Management > User and Groups Management > Local User Configuration > Adding Users.
- On the Nsync server, grant that user (ex. nsyncsource1) write access to the nsync folder. For instructions on how to set up a folder's ACL, see Chapter 4: System Management > Folder Management > Folder Access Control List (ACL).
- 3. Once this is done, the target server will start accepting Nsync tasks from server using that ID and password.

Setting Up an Nsync Target on Another Device

If you selected "Other Device" when setting up your Nsync task, the ALL6800 will use the FTP protocol to back up the share folder. On the external storage device, make sure there is a folder named "nsync", and the Auth ID has writable permission in that folder.

Designating ALL6800 as an Nsync Target

The ALL6800 can act as an Nsync server, enabling another Nsync-equipped ALLNET NAS at a remote location backup their files to this ALL6800. From the **Network** menu, choose the **Nsync Target** item, and the **Nsync Target Server Setting** screen appears.

Nsync Target Server Setting	
Item	Description
Nsync Target Server	Enable or Disable Nsync Target support.

NOTE

To enable Nsync task to go thru firewall, you have to open port TCP/1194 on your firewall in both directions.

ALLNET Backup Utility

The ALLNET Backup Utility is on your Installation CD. When you click on the CD, the Backup Utility will be installed under **Program Groups** > **ALLNET Backup Utility**. If it is not installed, you can copy the file (**ALLNET Backup**

Utility.exe) to a convenient location on your hard disk and double click to execute it.



NOTE

Please find ALLNET Backup Utility on your CD.

When you execute this utility for the first time, it will ask you whether to create a DB file. Click *Yes*.

1. Click *Add* to create a Backup task. The **Add New Task** dialog box appears.

Add New Task		
Item	Description	
Task	Specifies a name for the current task.	
Source	Click to specify the source folder/file location.	
Incremental	Click to specify whether the backup will be incremental.	
	If unchecked, the backup will be a full backup.	
Destination	Click to specify the destination folder/file location.	
Excluded extensions	Files with these file name extensions will be skipped and not	
	back up to the destination.	
Comments	If you wish, enter comments here for your records.	

- 2. To schedule the task to run at regular intervals, click on the *Schedule* icon for that task. You can schedule the task to run **Monthly** or **Weekly**.
- 3. To check the log for that task, click on the *Log* icon for that task.

NOTE

ALLNET Backup Utility also supports MAC OS X. Just copy the ALLNET Backup Utility.dmg to your MAC OS X machine and double click to execute it.

Windows XP Data Backup

If you use Windows XP Professional, you can also use the Windows Backup Utility (Ntbackup.exe) to backup your files.

If you use Windows XP Home Edition, follow these steps to install the utility:

- 1. Insert the Windows XP CD into a drive and double-click the *CD* icon in **My** Computer.
- When the Welcome to Microsoft Windows XP screen appears, click *Perform Additional Tasks*.
- 3. Click Browse this CD.
- 4. In Windows Explorer, navigate to *ValueAdd* > *Msft* > *Ntbackup*.
- 5. Double-click *Ntbackup.msi* to install the backup utility.

Once installed, you can use the Windows Backup Utility by following the steps below:

- 1. Click *Start*, and point to *All Programs* > *Accessories* > *System Tools* > *Backup* to start the wizard.
- 2. Click *Next* to skip past the opening page. Choose **Backup files and settings** from the second page, and then click *Next*.
- 3. Select which option you want to back up.
- 4. Click **Next** and in the Backup Type, Destination, and Name page, specify a back up location using the **Browse** button.
- 5. Find and select the drive that specifies your ALL6800 as your backup destination and click *Next*.
- 6. Click *Next* to display the wizard's final page and click *Finish* to start backing up.

Apple OS X Backup Utilities

Mac OS X does not include any backup software. However, there are a number of backup solutions available for the Mac OS X, including: iBackup, Psyncx, iMSafe, Rsyncx, Folder Synchronizer X, Tri-BACKUP, Impression, Intego Personal Backup, SilverKeeper, and Apple's dotMac Backup utility to name just a few. To find even more freeware and shareware backup utilities to choose from, go to VersionTracker or MacUpdate and search on "backup".

Chapter 7: Tips and Tricks

USB and eSATA Storage Expansion

The ALL6800 supports external USB hard disks through its four USB ports. Once a USB hard disk has successfully mounted, the entire volume will be copied automatically to the default USB HDD folder. The ALL6800 supports up to 6 USB external storage devices. All file names on the USB disk volume are case sensitive.

The ALL6800 also supports eSATA hard disks with its eSATA port.

Before attaching an eSATA or USB disk drive to ALL6800, you have to partition and format it on a desktop computer or a notebook first. The attached device will be located at $\100\$ usbhdd\sdf1 where 192.168.1.100 means the IP address of ALL6800 and sdf1 stands for the first partition on disk #6, the eSATA or USB disk drive. If it is an NTFS partition, NAS users can open or copy files from $\100\$ usbhdd\sdf1 but cannot add new files or modify existing files.

NOTE

If you want to write to an USB storage device, the file system must be FAT32.

USB Storage	FAT32 Partition	NTFS Partition
Read	OK	OK
Write	OK	-

Adding a Spare Disk

With a RAID 1, RAID 5, RAID 6, or RAID 10 volume, you can add a spare disk after the initial RAID is setup. To add a spare disk, follow the steps below:

- 1. On the **RAID Configuration Screen**, tick the checkbox of the hard disk you wish to designate as a spare disk.
- 2. Click *Add Spare*. The disk will be configured as a spare disk. The system automatically rebuilds the spare disk when one of the disks in the RAID set fails.

Remote Administration

You can set up your ALL6800 for remote administration. With remote administration, you can access your ALL6800 over the Internet, even if your ALL6800 is behind a router. This is especially useful if you are traveling and suddenly need a file from your ALL6800.

Setting up remote administration is a three-part process, and will require the following equipment:

- ALLNET ALL6800 NAS device
- Cable/DSL Router with Dynamic DNS support
- Home PC
- Internet Connection

NOTE

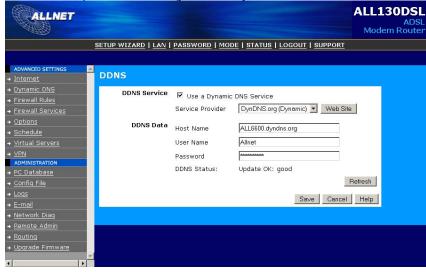
Router setup will differ slightly depending on router used. For this example, we will use the Asus WL500g because it has support for Dynamic DNS. Contact your router hardware vendor for setup help.

Part I - Setup a DynDNS Account

- 1. Go to http://www.dyndns.org from your home PC.
- 2. Click on the Sign Up Now link.
- 3. Check the Check boxes, select a user name (i.e.: ALL6800), enter your email address (i.e.: xxx@example.com), check *Enable Wildcard*, and create a password (i.e.: xxxx).
- 4. Wait for an email from www.dyndns.org.
- 5. Open the email and click on the link to activate your account

Part II - Enable DDNS on the Router

- 1. Go to the router setup screen and select *IP Config > Miscellaneous DDNS Setting* from your Home PC.
- 2. Click on Yes for Enable the DDNS Client?
- 3. Select www.dyndns.org.
- 4. Go to router setup screen, and enter the following information:
 - a. User Name or E-mail Address: xxx@example.com
 - b. Password or DDNS Key: xxxx
 - c. Host Name: www.ALL6800.dyndns.org
 - d. Enable wildcard? Select Yes
 - e. Update Manually: Click Update



Part III - Setting up Virtual Servers (HTTPS)

- 1. Navigate to **NAT Setting** > **Virtual Server**.
- 2. For Enable Virtual Server?, select Yes
- 3. Setup the HTTPS Server
 - a. Well-Known Applications: Select User Defined
 - b. Local IP: Enter 192.168.1.100
 - c. Port Range: 443 (the default HTTPS port setting on the ALL6800)
 - d. Protocol: select TCP
 - e. Click Add.
 - f. Click *Apply*.
- 4. Test the HTTPS connection from another computer on the Internet
 - a. From a remote computer, open your browser and enter https://www.ALL6800.dyndns.org

b. You should see the login page of ALL6800. ALL130DSL ALLNET ADS Modem Rout<u>e</u> SETUP WIZARD | LAN | PASSWORD | MODE | STATUS | LOGOUT | SUPPORT **Inbound Services** HTTPS(TCP:443) • Service: ALLOW always ~ Action: → Firewall Services Send to LAN Server: ALL6600 (192.168.0.199) (LAN) WAN Users: Single/Start: Finish: → Confiq File Always 💌 → <u>Logs</u> → <u>E-mail</u> Log: Save Cancel Back Help

Firewall Software Configuration

If you are using a software firewall (i.e. Norton Internet Security) and are having trouble connecting to the ALL6800, you can try the following steps:

- 1. Double click the **NIS** icon on system tray, and then configure the **Personal Firewall**.
- 2. On the **Programs** page, find the **SetupWizard.exe** and change its permission to "Permit All". If it's not in the program list, use the **Add** or **Program Scan** buttons to find it.
- 3. On the **Networking** page, manually add ALL6800 IP address (i.e. 192.168.1.100) to the **Trusted** list.

Replacing Damaged Hard Drives

If you are using RAID 1, RAID 5, RAID 6, or RAID 10, you can easily replace a damaged hard drive in the ALLNET ALL6800 while keeping your data secure with the system's automatic data recovery.

Hard Drive Damage

When a hard drive is damaged and data in the RAID volume, the system LCD will display warning message also the system beeps.

Replacing a Hard Drive

To replace a hard disk drive in the ALL6800:

- 1. Remove the tray with the damaged hard disk.
- 2. Unscrew the damaged hard disk and remove it from the tray.
- 3. Slide a new hard disk into the tray and fasten the screws.
- 4. Insert the hard disk tray back into the ALL6800 until it snaps into place. You can also lock it with a key if desired.
- 5. The LED blinks green when the HDD is accessed.

RAID Auto-Rebuild

When using RAID 1, 5, 6, or 10 on the ALL6800, you can use the auto-rebuild function when an error is detected.

- 1. When a hard disk fails the system beeps and/or an email notification is sent to specified receivers.
- 2. Check the LCD to see which disk has failed.
- 3. Follow the steps mentioned above to replace the failed hard disk.
- 4. The system automatically recognizes the new hard disk and starts the auto-rebuild sequence to resume its status before the hard disk crash.

Chapter 8: Troubleshooting

Forgot My Network IP Address

If you forget your network IP address and have no physical access to the system, you can find out the IP address by either looking directly onto the ALL6800's LCD panel, or by using the setup wizard to retrieve the IP of your ALL6800.

- 1. Start the Setup Wizard, and it will automatically detect all ALLNET IP storage products on your network.
- 2. You should be able to find the IP address of the ALL6800 which you have forgotten in the **Device Discovery** screen.

Can't Map a Network Drive in Windows XP

You may have problems mapping a network drive under the following conditions:

- 1. The network folder is currently mapped using a different user name and password. To connect using a different user name and password, first disconnect any existing mappings to this network share.
- 2. The mapped network drive could not be created because the following error has occurred: Multiple connections to a server or shared resource by the same user, using more than one user name, are not allowed. Disconnect all previous connections to the server or shared resource and try again.

To check out existing network connections, type net use under the DOS prompt.

Restoring Factory Defaults

From the **System** menu, choose the *Factory Default* item and **the Reset to** Factory Default screen appears. Press *Apply* to reset the ALL6800 to factory default settings.



Resetting to factory defaults will not erase the data stored in the hard disks, but WILL revert all the settings to the factory default values.

Problems with Time and Date Settings

The administrator is able to select an NTP Server to keep the ALL6800's time synchronized. However, if the ALL6800 can not access the Internet, you may encounter a problem when setting the Time and Time Zone. If this happens:

- 1. Login to the Web Administration Interface.
- 2. Navigate to **System** > **Time**.
- 3. Under NTP Server, select No.
- 4. Set the **Date**, **Time**, and **Time Zone**.
- 5. Click Apply.

In addition, if the ALL6800 is able to access the Internet and you want to keep the NTP Server clock.isc.org by default, please make sure the DNS Server is correctly entered, thereby allowing the NTP Server name to correctly resolve. (See Network > WAN > DNS Server)

Appendix A: Product Specifications

Hardware Specifications

Product Model	ALL6800	
Network Interfaces		
WAN	Gigabit RJ-45 connector	
LAN	Gigabit RJ-45 connector	
Storage		
HDD Bays	7 x 3.5" SATA II HDD, hot-swappable	
HDD Support	SATA II HDDs up to 1000GB	
eSATA	1 x eSATA connector for capacity expansion	
I/O Interfaces		
USB Ports	4 x USB type A ports (Host mode)	
System Information		
LCD Control Panel	For basic configurations and status display	
System LED Display	6 x LED (Power, System status, Network Activity x 2, USB Copy, eSATA link)	
Physical	2, 332 336,7 337	
Height	320 mm	
Width	210 mm	
Depth	270 mm	
Power Supply	Server-rated AC power supply	
	100/220V AC, 50/60Hz, Auto-detect	
Security	Lockable disk trays	
Environment		
Temperature	5 ~ 40°C	
Humidity	20 ~ 85% relative humidity (non-condensing)	
Certifications	CE, FCC, BSMI, C-Tick, VCCI, RoHS Compliant	

Software Specifications

Network File Protocols	Microsoft Networks (CIFS/SMB)
	Apple Filing Protocol (AFP 3.0)
	Network File System (NFS v3)
	File Transfer Protocol (FTP)
	Hyper Text Transfer Protocol (HTTP)
	Secure Hyper Text Transfer Protocol (HTTPs)
Authentication	Local User Account
	Microsoft Active Directory Authentication (AD)*
Network Client Type	Microsoft Windows NT/2000/XP/2003/Vista
	Unix/Linux/BSD
	MAC OS X/9
Network Configuration	Fixed IP address
	Dynamic IP address
	802.3ad based failover and link aggregation
Disk Management	Disk status monitoring (S.M.A.R.T.)
	Disk idle spin-down
RAID	RAID 0, 1, 5, 6, 10 and JBOD
	Supports multiple RAID modes – users can create
	multiple RAID volumes with different RAID levels in

	one system
	Auto rebuild
	Hot swappable
	Hot spare
	Disk roaming
	RAID level migration
	RAID expansion
iSCSI Target	Supports:
	Microsoft iSCSI Initiator v2.0.4
	StarPort Initiator V3.5.2
	MAC OS: globalSAN iSCSI initiator version 3.0
	(1150)
	Linux: open-iscsi 2.0-865
Folder Management	Share folder level permission
	Public folder
Quota Management	Share folder quota control
Backup	ALLNET Backup Utility (Windows XP/2000 and MAC
	OS X)
	ALLNET Nsync
System Management	Web GUI
	Multilingual support (English, French, German,
	Italian, Traditional Chinese, Simplified Chinese,
	Japanese, Korean, and Spanish)
	NTP support
	Wake-on-LAN
	Scheduled Power On/Off
Event Notification	Email notification
	Buzzer notification
	LCD
UPS Support	UPS monitoring via RS-232 and system shutdown
	on low battery
Printer Server	USB Printer (IPP support)
Supported USB Devices	USB Printer
	External HDD/flash disk
	USB IEEE 802.11 b/g dongle w/AP mode support**
Setup Utility	Windows 2000/XP/2003
Jordan Julies	MAC OS X
	I WAY OF A

^{*}AD support: Works as a client member in a Microsoft Active Directory domain, allowing the ALL6800 to utilize the domain users and groups setting for authentication to the system and authorization to the share folders.

^{**}For supported USB dongles, please contact sales@ALLNET.de

Appendix B: RAID Basics

Overview

A Redundant Array of Independent Disks (RAID) is an array of several hard disks that provide data security and high performance. A RAID system accesses several hard disks simultaneously, which improves I/O performance over a single hard disk. Data security is enhanced by a RAID, since data loss due to a hard disk failure is minimized by regenerating redundant data from the other RAID hard disks.

Benefits

RAID improves I/O performance, and increases data security through fault tolerance and redundant data storage.

Improved Performance

RAID provides access to several hard disk drives simultaneously, which greatly increases I/O performance.

Data Security

Hard disk drive failure unfortunately is a common occurrence. A RAID helps prevent against the loss of data due to hard disk failure. A RAID offers additional hard disk drives that can avert data loss from a hard disk drive failure. If a hard drive fails, the RAID volume can regenerate data from the data and parity stored on its other hard disk drives.

RAID Levels

The ALLNET ALL6800 supports standard RAID levels 0, 1, 5, 6, 10, and JBOD. You choose a RAID level when you create a system volume. The factors for selecting a RAID level are:

- Your requirements for performance
- Your need for data security
- Number of hard disk drives in the system, capacity of hard disk drives in the system

The following is a description of each RAID level:

RAID 0

RAID 0 is best suited for applications that need high bandwidth but do not require a high level of data security. The RAID 0 level provides the best performance of all the RAID levels, but it does not provide data redundancy.

RAID 0 uses disk striping and breaking up data into blocks to write across all hard drives in the volume. The system can then use multiple hard drives for faster read and write. The stripe size parameter that was set when the RAID was created determines the size of each block. No parity calculations complicate the write operation.

RAID 1

RAID 1 mirrors all data from one hard disk drive to a second one hard disk drive, thus providing complete data redundancy. However, the cost of data storage capacity is doubled.

This is excellent for complete data security.

RAID 5

RAID 5 offers data security and it is best suited for networks that perform many small I/O transactions at the same time, as well as applications that require data security such as office automation and online customer service. Use it also for applications with high read requests but low write requests.

RAID 5 includes disk striping at the byte level and parity information is written to several hard disk drives. If a hard disk fails the system uses parity stored on each of the other hard disks to recreate all missing information.

RAID 6

RAID 6 is essentially an extension of RAID level 5 which allows for additional fault tolerance by using a second independent distributed parity scheme (dual parity) Data is striped on a block level across a set of drives, just like in RAID 5, and a second set of parity is calculated and written across all the drives; RAID 6 provides for an extremely high data fault tolerance and can sustain two simultaneous drive failures.

This is a perfect solution for mission critical applications.

RAID 10

RAID 10 is implemented as a striped array whose segments are RAID 1 arrays.

RAID 10 has the same fault tolerance as RAID level 1.

RAID 10 has the same overhead for fault-tolerance as mirroring alone. High I/O rates are achieved by striping RAID 1 segments.

Under certain circumstances, RAID 10 array can sustain up to 2 simultaneous drive failures

Excellent solution for applications that would have otherwise gone with RAID 1 but need an additional performance boost.

JBOD

Although a concatenation of disks (also called JBOD, or "Just a Bunch of Disks") is not one of the numbered RAID levels, it is a popular method for combining multiple physical disk drives into a single virtual one. As the name implies, disks are merely concatenated together, end to beginning, so they appear to be a single large disk.

As the data on JBOD is not protected, one drive failure could result total data loss.

Stripe Size

The length of the data segments being written across multiple hard disks. Data is written in stripes across the multiple hard disks of a RAID. Since multiple disks are accessed at the same time, disk striping enhances performance. The stripes can vary in size.

Disk Usage

When all 5 disks are of the same size, and used in RAID, ALL6800 disk usage percentage is listed below:

RAID Level	Percentage Used
RAID 0	100%
RAID 1	20%
RAID 5	80%
RAID 6	60%
RAID 10	50%
JBOD	100%

NOTE

RAID 10 allows only 4 disks and one as spare disk.

Appendix C: Active Directory Basics

Overview

With Windows 2000, Microsoft introduced Active Directory (ADS), which is a large database/information store. Prior to Active Directory the Windows OS could not store additional information in its domain database. Active Directory also solved the problem of locating resources; which previously relied on Network Neighborhood, and was slow. Managing users and groups were among other issues Active Directory solved.

What is Active Directory?

Active Directory was built as a scalable, extensible directory service that was designed to meet corporate needs. A repository for storing user information, accounts, passwords, printers, computers, network information and other data, Microsoft calls Active Directory a "namespace" where names can be resolved.

ADS Benefits

ADS lets the ALL6800 integrate itself with the existing ADS in an office environment. This means the ALL6800 is able to recognize your office users and passwords on the ADS server. Other major benefits ADS support provides include:

1. Easy integration of the ALL6800 into the existing office IT infrastructure

The ALL6800 acts as a member of the ADS. This feature significantly lowers the overhead of the system administrator. For example, corporate security policies and user privileges on an ADS server can be enforced automatically on the ALL6800.

2. Centralized user/password database

The ALL6800 does not maintain its own copy of the user/password database. This avoids data inconsistency between the ALL6800 and other servers. For example, without ADS support, an administrator might need to remove a specific user privilege on the ALL6800 and each individual server. With ADS support, the change on an ADS server is known to all of its ADS members.

Appendix D: UPS Compatibility List

Brand	Series	Model	Notes
Ablerex	MS-RT		110100
ActivePower	1400VA		
AEC	MiniGuard UPS 700 M2501 cable		
	Back-UPS Pro		
	Matrix-UPS		
	Smart-UPS		
APC	Back-UPS	940-0095A/C cables, 940-0020B/C cables, 940-0023A cable	
AI C	Back-UPS Office	940-0119A cable	
	Masterswitch Not a UPS - 940- 0020 cable		
	Back-UPS RS 500 custom non- USB cable		
	Regulator Pro serial		
Belkin	Resource		
חבועוון	Home Office	F6H350-SER, F6H500-SER, F6H650-SER	
	Universal UPS	F6C800-UNV, F6C120-UNV, F6C1100-UNV, F6H500ukUNV	
	Fortress (newer)		
	Fortress Telecom		
	Axxium Rackmount		
	Patriot Pro		
Best Power	Patriot Pro II		
	Patriot INT51 cable		
	Micro-Ferrups		
	Fortress/Ferrups f-command support		
Centralion	Blazer		
Clary	ST-800		
Compaq	T1500h		
Cyber Power Systems		320AVR, 500AVR, 650AVR, 700AVR, 800AVR 850AVR, 900AVR, 1250AVR, 1500AVR, Power99 550SL, 725SL, CPS825VA, 1100AVR, 1500AVR-HO	
Deltec	PowerRite Pro II		
Dynex	975AVR		
Effekta	MI/MT/MH 2502 cable		
Energy Sistem	(various)		
ETA	mini+UPS WinNT/Upsoft cable		
ETA	mini+UPS PRO UPS Explorer cable		
Ever UPS	NET *-DPC		
2401010	AP *-PRO		
Ever-Power	625/1000		
Exide	NetUPS SE		
	PowerPal P-series		
Fenton Technologies	PowerPal L-series		
	PowerOn		
	PowerPure		
Fairstone		L525/L625/L750	
Fideltronik	Ares 700 and larger		
i ideiliollik	Other Ares models		

Brand	Series	Model	Notes
Fiskars	PowerRite MAX		
	PowerServer	10, 30	
	All models with alarm interface		
	MP110/210		
Gamatronic	MS-T		
	MS		
	μPS3/1		
Gemini	UPS625/UPS1000		
5	R3000 XR		
HP	R5500 XR		
INELT	Monolith 1000LT		
Infosec	iPEL	350, 500, 750, 1000	
Ippon	(various)		
Liebert	UPStation GXT2 contact-closure cable		
Masterguard	(various)		
	HF Line	14 boards, /2 58 boards	
	HF Millennium	810, 820	
	HF TOP Line	910, 920, 930, 940, 950, 960, 970, 980	
Meta System	ECO Network	750, M1000, M1050, M1500, M1800 M2000, M2100, M2500, M3000	
	ECO	305, 308, 311, 511, 516, 519, 522	
	ally HF	800, 1000, 1250, 1600, 2000, 2500	
	Megaline	1250, 2500, 3750, 5000, 6250, 7500, 8750, 10000	
	NOVA AVR 600 Serial		
	NOVA AVR 1100 Serial		
	Pulsar Ellipse	USBS Serial cable, S, Premium USBS Serial cable, Premium S	
	Ellipse Office	600 Serial cable, 750 Serial cable, 1000 Serial cable, 1500 Serial cable	
	Pulsar EXtreme C / EX RT		
	Comet EX RT	Serial port, 3:1 Serial port	
MGE UPS	Pulsar Esprit		
SYSTEMS	Evolution S	1250, 1750, 2500, 3000	Serial Port
	Pulsar M	2200, 3000, 3000 XL	Serial Port
	Pulsar	700, 1000, 1500, 1000 RT2U, 1500 RT2U, MX 4000 RT, MX 5000 RT Evolution, EXtreme C, ES+, ESV+, SV, ESV, EX, EXL, PSX, SX, Extreme	Serial Port
	Comet EXtreme		
	Comet / Galaxy (Serial)	Utalk Serial Card (ref 66060), HID COM Serial Card (ref 66066)	
MicroDowell	B.Box BP	500, 750, 1000, 1500	
	Solis	1.0 1000VA, 1.5 1500VA, 2.0 2000VA, 3.0 3000VA	
Microsol	Rhino	6.0 6000VA, 7.5 7500VA, 10.0 10000VA, 20.0 20000VA	
	Various		
Mustek	Powermust	400VA Plus, 600VA Plus, 800VA Pro 1000VA Plus, 1400VA Plus, 2000VA USB	
Nitram	Elite	500, 2002	
Oneac	EG/ON Series advanced interface		
Online	P-Series		
OnLite	AQUA 50		
Orvaldi	various not 400 or 600		
Powercom	SMK-800A		
	ULT-1000		

Brand	Series	Model	Notes
Powercom	TrustTrust 425/625		
	BNT-1000AP		
	Advice Partner/King Pr750		
	BNT-2000AP		
PowerGuard	PG-600		
PowerKinetics	9001		
PowerTech	Comp1000 DTR cable power		
Power Walker	Line-Interactive VI1000		
Powerware		3110, 3115, 5119, 5125, 5119 RM, PW5115 PW5125PW9120, PW9125, 9120, 9150, 9305	
Powerwell	PM525A/-625A/-800A/-1000A/- 1250A		
	RPF525/625/800/1000		
Repotec	RPT-800A		
	RPT-162A		
SMS (Brazil)	Manager III		
SOLA		325, 520, 610, 620, 330	
SOLA/BASIC Mexico	various ISBMEX protocol		
Socomec Sicon	Egys 420 VA		
Soltec	Winmate 525/625/800/1000		
Soyntec	Sekury C	500, 800	
SquareOne Power	QP1000		
SuperPower	HP360, Hope-550		
	500/1000 smart - shipped with SafeNet		
Sweex	500/1000 contact closure - shipped with UPSmart		
	BC100060 800VA		
Sysgration	UPGUARDS Pro650		
Tecnoware	Easy Power 1200		
	SmartUPS		
Tripp-Lite	SmartOnline		
	(various) Lan 2.2 interface - black 73-0844 cable		
Trust	UPS 1000 Management PW- 4105		
UNITEK	Alpha	500 IC, 1000is, 500 ipE	
UPSonic	LAN Saver 600		
UF SUIIIC	Power Guardian		
Victron/IMV	(various)		
VICUUII/IIVIV	Lite crack cable		

NOTE

- The UPSes marked Blue have been tested and work well
 If your UPS is not in the support list, be sure that the UPS supports one of following protocols:
 SEC protocol
 Generic RUPS model
 Generic RUPS 2000 (Megatec M2501 cable)
 PhoenixTec protocol
 Safenet software

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