ALLNET ALL6500

NAS DiskServer

User's Manual

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About This Manual

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

Limited Warranty

Product name: ALLNETALL6500

Manual Version: 1.0

Release Date: September 2005

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Chapter 1. Introduction

Thank you for choosing the ALLNET ALL6500. With rich built-in software applications, the ALL6500 is easy to configure and setup. It enables simple and secure distribution of all types of digital files, such as music, photos, and data via an IP network. The ALL6500 provides high data availability and fault protection using a RAID structure. There are two Gigabit Ethernet ports which enhance network efficiency, enable advanced file management functions, multiple application sharing, and faster data response all at once. The ALL6500 allows data consolidation and sharing between Windows (SMB/CIFS), UNIX/Linux, and Apple OS X environments. The ALL6500's user-friendly web management interface supports multiple languages.

Package Contents

- One (1) ALLNET ALL6500
- One (1) Accessory Pack:
  - One (1) power cord
  - Two (2) RJ-45 Ethernet cables
  - Twelve (12) hard disk screws
  - One (1) installation CD
  - Quick installation guide
  - Warranty card

Hardware Overview

Front Panel

- **ALL6500 Front Panel**

Back Panel

LAN 1/LAN 2: High speed connections to your network hub/switch.

Power Socket: Connect power cord, ideally from a surge protector.

Power LED	Blue: System power on
System Status LED	Blinking orange: System startup
	Blinking red: System error
	Off: System startup complete; system operating normally
HDD 1 LED	Blue: HDD 1 detected
(blue/red)	Blinking blue: Active HDD 1 data transfer
	Red : HDD 1 error detected
	Blinking red: HDD 1 capacity is nearly full (90% or more)
	* If RAID is configured, capacity is based on the entire RAID system.

HDD 2 LED (blue/red)	Blue: HDD 2 installed
	Blinking blue: Active HDD 2 data transfer
	Red: HDD 2 error
	Blinking red: HDD 2 capacity is nearly full (90% or more)
	* If RAID is configured, capacity is based on the entire RAID system.
One-Button USB Copy	Push the button to copy entire USB volume to theALL6500. Files are stored in a folder named by current time stamp: (YearMonthDayHHMM)
LAN 1 LED (green)	Green: Network connected
	Blinking green: Network activity
LAN 2 LED (green)	Green: Network connected
	Blinking green: Network activity
USB LED	USB Device Connection:
	Blinking blue (5 seconds) : USB device connected successfully. *For universal USB memory card reader, USB LED will blink blue when one or more card is mounted successfully.
	Blinking red (5 seconds) : USB device connection failure
	Data Transfer:
	Blinking blue: Active data transfer
	Blinking red: USB device read/write error

USB Port: USB 2.0 port for USB storage expansion.

Power Button: Turn on/off ALL6500.

USB Copy Button: Automatically copy entire USB storage content to the ALL6500.

Hard Disk Installation

The ALL6500 supports up to two Serial ATA (SATA) hard disks.

To install hard disks into the ALL6500, please follow the diagrams below:

1. Remove two screws located on the back of the unit using a Philips screwdriver.

2. Unscrew four mounting screws.

3. Lift up the hard disk tray by pulling up the top panel of the ALL6500.

4. Carefully insert a standard 3.5" SATA hard disk into the tray, and secure the hard disk with screws from the included accessory pack.

5. If you are installing two hard disks, please insert the second hard disk at the bottom of the tray and secure it with screws from the included accessory pack.

6. Carefully lower the hard disk tray back into the ALL6500.

7. After making sure the tray is in place and the connectors are aligned, secure the hard disk tray with screws.

Connect & Setup the ALL6500

1. Connect the first Ethernet port (LAN 1) to your network hub/router.

2. Plug in the power cord and turn on the system.

3. Make sure system is running properly by checking all front panel LEDs for any error indications.

Installation Wizard

To configure ALL6500 using simple Installation Wizard, insert the installation CD into your CD-ROM drive (host PC must have connection to the above network). The Setup Wizard should launch automatically. If not, please browse your CD-ROM drive and double click on Setup.exe. The Setup Wizard will start and automatically detect all ALL6500s on your network. If none are found, please check your connection and refer to the Troubleshooting Guide.

Complete the following steps for basic system configurations.

1. Insert the installation CD into your CD-ROM drive (host PC must have connection to the above network).
2. The Setup Wizard should launch automatically. If not, please browse your CD-ROM drive and double click on Setup.exe
3. The Setup Wizard will start and automatically detect all ALL6500s on your network. If none are found, please check your connection and refer to the Troubleshooting Guide at the back of the ALL6500 User's Manual.

4. Select the ALL6500 that you like to configure.

5. Login with the default administrator account and password. The default account and password are both *"admin"*.
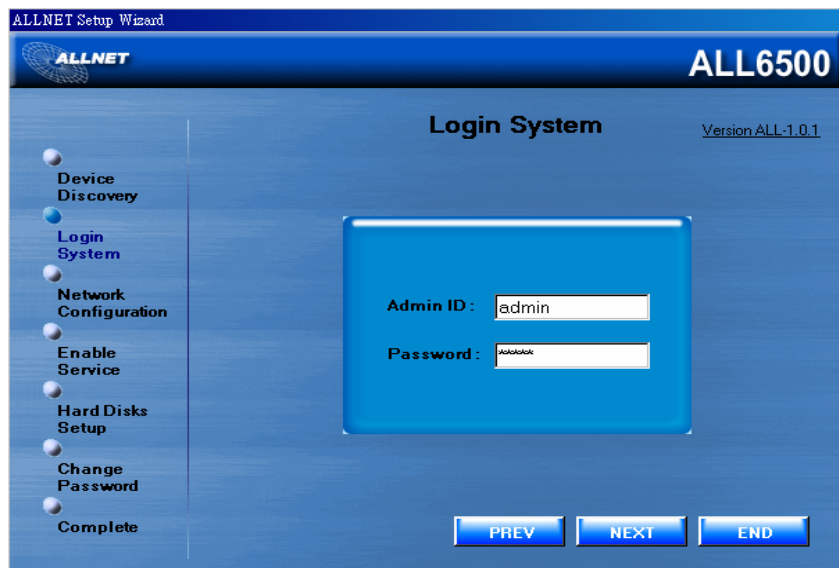
6. Name your ALL6500 system and configure the network IP address. If your router in configured as a DHCP Server, configuring the ALL6500 to automatically obtain an IP address is recommended. You may also use a static IP address and enter the DNS Server address manually.

7. Enable the services you wish to make publicly accessible. The ALL6500 offers FTP Server and iTunes® Server. Check "Local System Time" to synchronize the system time with your local computer.

8. Refer to the following chart and select the hard disk configuration that best suits your usage model.

Setup Options	High Performance	Increased Reliability
1 Disk JBOD	No	No
2 Disk RAID 0	Yes	No
2 Disk RAID 1	Yes	Yes
2 Disk JBOD	No	No

RAID 0 – Spanning: Combine 2 physical hard disks into one or more logical drives. Data is separated into threads and stored across both physical drives.

RAID 1 – Mirroring: Use the 2nd hard disk as a mirror image of the 1st hard disk for increased reliability.

JBOD – Expansion: Similar to RAID 0, but files are stored in whole on any available hard disks.

9. Change the default administrator password.

10. Finished! Access the current ALL6500 administrator webpage by pressing the "Web Management" button. You can also configure another ALL6500 at this point.

Chapter 2. System Management

The ALL6500 provides an easily accessible web management interface. The administrator may configure and monitor ALL6500 anywhere on the network.

System Web Management Login

Make sure your network is connected to the Internet.   To access the ALL6500 management webpage:

1. Type inALL6500's IP address in 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 ALL6500. If theALL6500 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**.   See the appendix for more information on IP settings.

2. Login to the system using factory default administrator user name and password:

      User Name: *admin*
      Password: *admin*

Check System Status

Once you login, you will first see the basic **Product Information** page providing **Product Number, Serial Number, Firmware Version,** and **System Up Time** information. The **Status** menu provides basic system information such as **Product Model Number, Hardware/Software Versions** and **System Profile.**

System Status

From the Status menu, choose the **System** item, and the System Status and Disk Information screen appears. This screen provides basic system status information. The Disk Information screen can also be found in the **Disks** item of the Storage menu.

CPU Loading	Displays current CPU workload of theALL6500.
Memory size	Shows the size of system memory.
System Temperature	Shows current system processor temperature.
HDD Temperature	Shows current hard disk drive temperature.
Fan RPM	Shows cooling fan speed in revolutions per minute (RPM).
Up Time	Shows how long the system has been turned on.
Disk Information	Displays the hard disk capacity, model name, bios firmware version, and disk status.

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ALL6500

Status ▾   Storage ▾   Network ▾   Accounts ▾   System ▾   Language

System
Info
About

System Status

CPU Loading(%)	100	%
Memory Size(KB)	257,168	KB
System Temperature	37 / 99	(°C / °F)
HDD Temperature	34 / 93	(°C / °F)
Fan RPM	4200	RPM
Up Time	22 minutes	

Disk Information

Disk Slot	Capacity (MB)	Model	Firmware	Status
1	114,473	WDC WD1200JD-00H	08.0	OK
2	114,473	WDC WD1200JD-00H	08.0	OK
Total Capacity	**228,946**			

System Descriptions

From **Status** menu, choose the **Info i**tem, 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 Description	Shows the system description that would also appear on the Login page.

Product Information

From the **Status** menu, choose the **About** item**,** and the **Product Information** screen appears. The **Product Information** screen provides the following information about the system.

Manufacturer	Displays the name of the system manufacturer.
Product No.	Shows the model number of the system.
Serial No.	Shows the system's serial number.
Firmware version	Shows the current version of the system firmware.
Up time	Shows the total running time of the system.

Setup Hard Disks and File Folders

The Storage menu provides disk information and allows you to configure both RAID and file sharing.

Hard Disks Information

From the **Storage** menu, choose the **Disks** item and the Disks Information screen appears.   On the Disk Information table, a blank line shows that this particular disk slot is empty. If there is a problem with a disk, the Status column will display "Failed". This page will also show all external USB hard disks that are currently connected to the system.

Disk No.	Indicates the hard disk slot location.
Capacity	Shows the hard disk capacity in megabytes.
Model	Displays the hard disk model name.
Firmware	Shows the hard disk firmware version.
Status	Indicates the status of hard disks, and can read either **OK** or **Failed**.
Refresh	Press **Refresh** to rescan all USB ports and hard disk slots for new disks.

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Status ▾ | Storage ▾ | Network ▾ | Accounts ▾ | System ▾ | Language

- **Disks**
- RAID
- Folder
- Service Folder

Disks Information

Disk No.	Capacity (MB)	Model	Firmware	Status
1	114,473	WDC WD1200JD-00H	08.0	OK
2	114,473	WDC WD1200JD-00H	08.0	OK
Total Capacity	228,946			

Refresh

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Configure RAID Settings

From the **Storage** menu, choose the **RAID** item, and the RAID Information screen appears. The displayed information includes total RAID system capacity, RAID status, and the current RAID setting. To configure your RAID settings, press the **Config** button and the RAID Configuration screen appears.

RAID Level	Shows the type of RAID used in the system.
Total Capacity	Shows the total storage capacity after the RAID configuration.
Status	Indicates the status of the RAID, and can read either **Healthy** or **Failed**.
Used Percentage	Displays the percentage of used RAID capacity.
Stripe Size	Shows the current hard disk stripe size.
Remaining Time	Indicates the time remaining during RAID building process.

See Appendix C for basic information on RAID.

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ALL6500

Status ▾   Storage ▾   Network ▾   Accounts ▾   System ▾   Language

- Disks
- RAID
- Folder
- Service Folder

RAID Information

RAID Level	JBOD
Total Capacity	112,481 MB
Status	Healthy
Used Percentage	545 MB (1%)
Stripe Size	64 KB
Remaining Time	N/A

Config

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RAID Level

You can set the storage volume as either None, JBOD, RAID 0, or RAID 1. Configuration is usually required only when you first set up the device. A brief description of each RAID setting follows:

None	There is no existing storage volume.
JBOD	The storage volume is a single HDD with no RAID support.
RAID 0	Provides data striping but no redundancy. Improves performance but not fault tolerance. At least 2 HDDs are required.
RAID 1	Offers disk mirroring. Provides twice the read rate of single disks, but same write rate. Supports 2 HDDs. This option protects against single hard disk failure and provides data redundancy.

Disk Settings

With the **Disk Settings** menu, you can select the stripe size, configure your disks for RAID, as well as enter a name for each disk.

RAID	Check the box of the hard disk you wish to add to the storage 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.
Create RAID	Press this button to configure the file system and create a RAID storage volume.
Remove RAID	Press this button to nullify the RAID storage volume.

How to Create RAID

1. In the RAID Configuration screen, select JBOD, RAID 0, or RAID 1.

Note: *If data redundancy is your primary concern, choose RAID 1. If capacity is your primary concern, choose JBOD or RAID 0. See Appendix C for details.*

2. Check the hard disks you wish to create a RAID on. Specify stripe size—64K is default setting.
3. Press **Create** button to build the RAID storage volume.

Note: *Building a RAID array may take a prolonged period of time, depending on the size of hard drives and RAID mode.*

How to Remove RAID

1. In the RAID Configuration screen click on the **Remove** button.
2. The system automatically rebuilds and you can create a new RAID array.

WARNING! Removing RAID may destroy all data in the current RAID system. Backing up your data is highly recommended.

Manage Folders

From the **Storage** menu, choose **Folder**, and the Folder screen appears. This screen allows you to create and configure folders on the ALL6500 volume.

Folder name	Displays the name of the Share folder.
Description	Provides a description of the Folder..
ACL	Press ACL (Access Control List) to configure which users have access to this folder.
Edit	Press this button to enter the Edit screen and modify the Folder's name and description.
Del	Press this button to delete the folder. A screen appears asking to confirm the deletion.
Add	Press this button and the Add Folder screen appears, from which you can add a new folder.
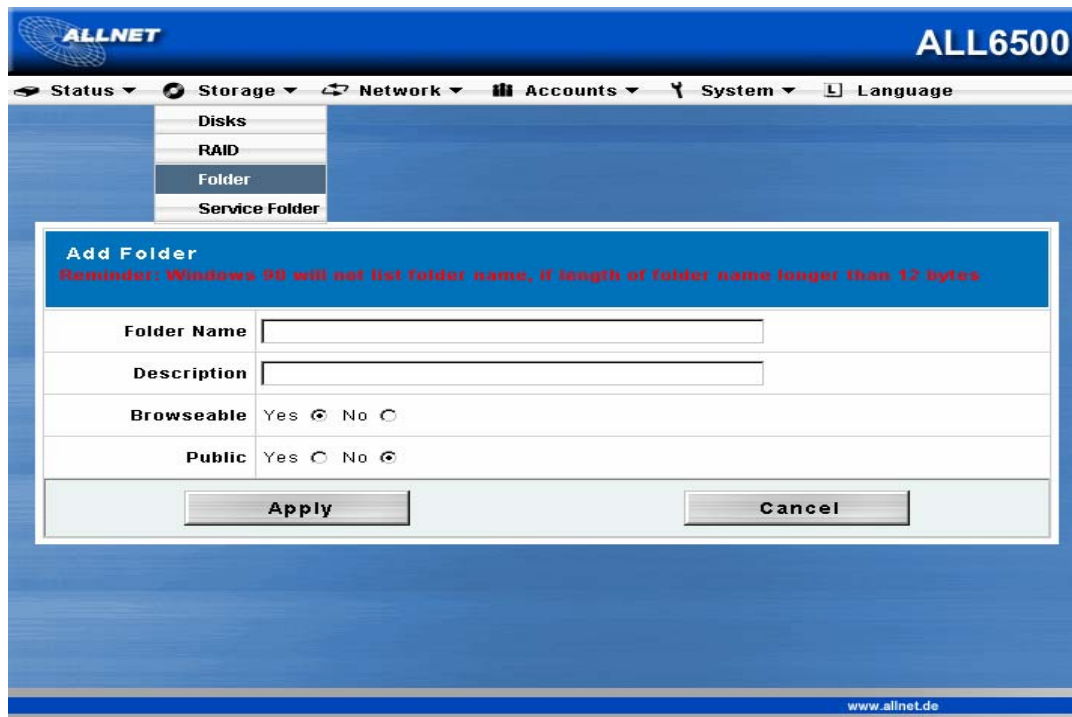
Add Folder

In the **Folder** screen press **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.

Folder Name	Enter the name of the Folder.
Description	Provide a description the Folder.
Browseable	Enable users to browse the folder content
Public	Deny or admit public access to this folder

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

Edit Folder

From the **Folder** screen, press the **Edit** button and the **Edit Share** screen appears. This screen allows you to change folder information. After entering the information, press **Submit** to apply the changes.

Folder Name	Display the name of the Share (Folder).
Description	Change the description of the Share (Folder).
Browseable	Enable users to browse the folder content
Public	Deny or admit public access to this folder

Delete Folder

To delete a folder, press the **Del** button from the specified folder row. The system will confirm folder deletion. Press **Yes** to delete the folder permanently or **Cancel** to go back to the folder list.
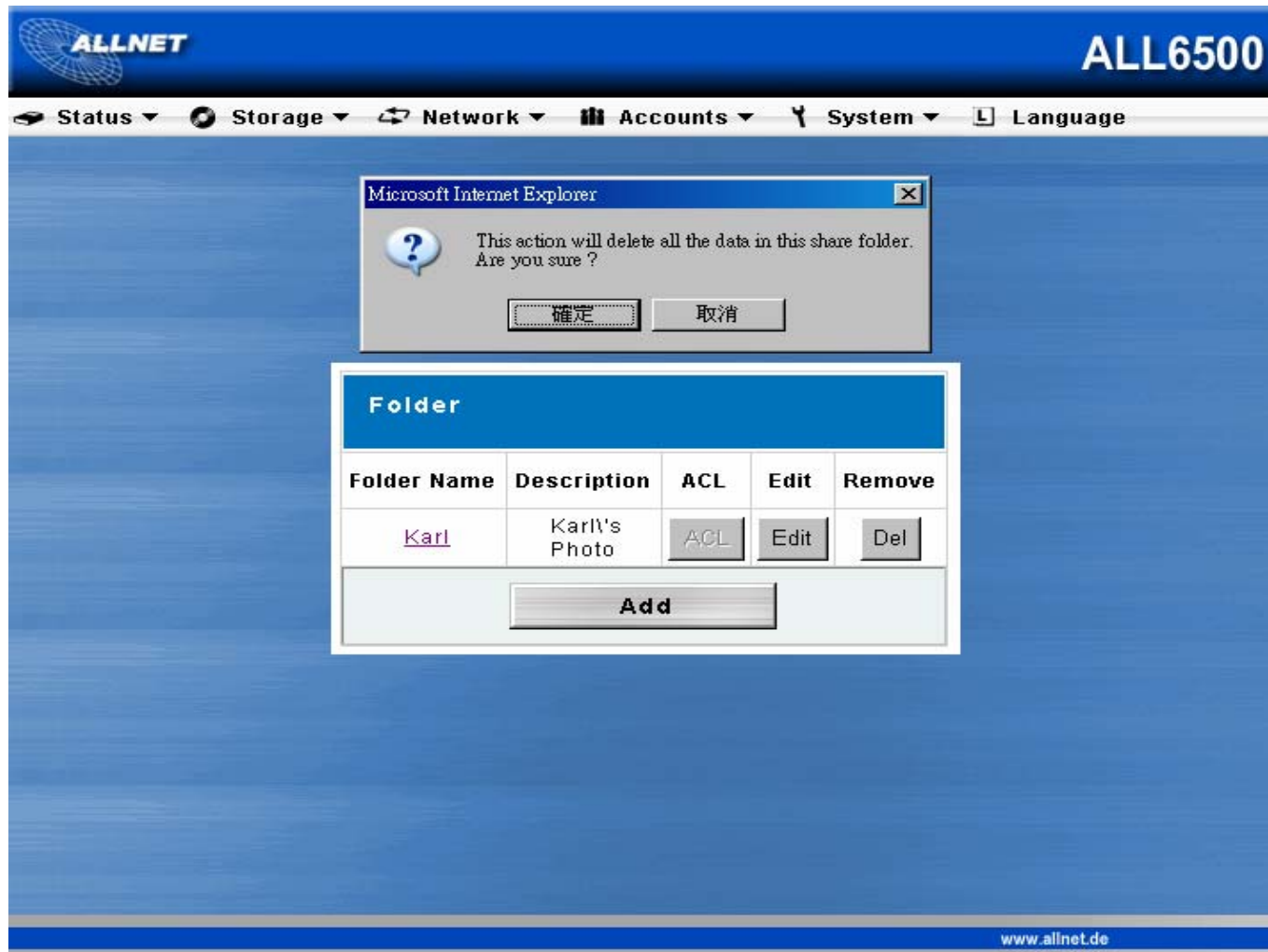
Folder Access Control List (ACL)
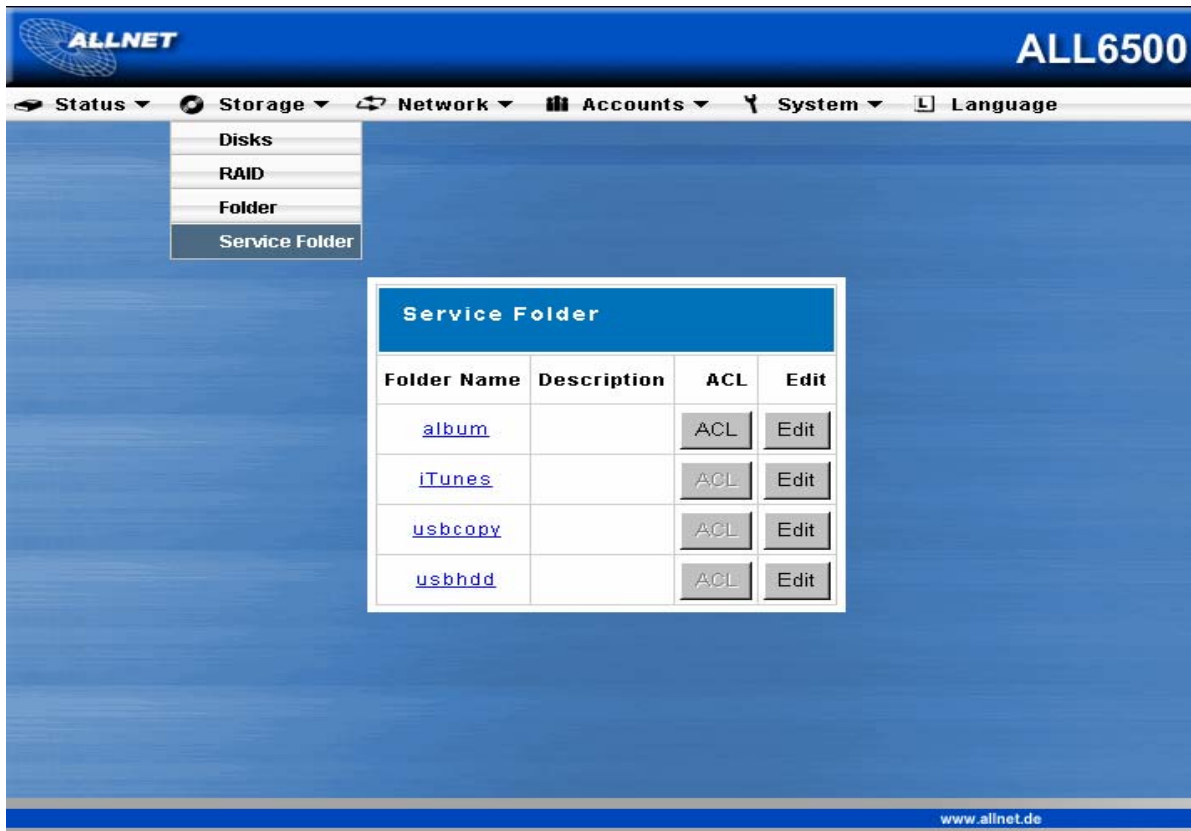
From the **Folder** screen press the **ACL** button, and the **Access Control List** screen appears. This screen allows you to configure access to specific folder for the users and groups. Select a user or a group from the left hand column and then choose **Deny, Read Only**, or **Writable** to configure their access level. Press the **Submit** button to confirm settings.

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 re-set their access privileges.
Submit	Submits and confirms settings.

Service Folder

The ALL6500 automatically creates folders for its built-in applications: *FTP Server, iTunes Server, Web Photo Server,* and *USB One-Button Copy.* These service folders are created when the related service is enabled during **Setup Wizard.** To manage these folders, select **Service Folder** from the **Storage** menu**.** You may edit these folders and use the *Access Control List* to control access to them.(To see the service folders, RAID must be built.)

Configure Network Settings

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

LAN 1 Configuration

From the **Network** menu, choose **LAN 1**, and the **Network Configuration** screen appears. This screen displays the network parameters of the system. You may change any of these items and press **Apply** to confirm your settings. See a description of each item in following table:

Host name	Host name to identify the ALL6500 on the network.
Domain name	Specifies the domain name of the ALL6500.
DHCP	Enable automatic IP settings or manually enter static network IP settings.
MAC Address	MAC address of the network interface.
IP	IP address of the LAN 1 network 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

Note: Enabling DHCP automatically turns on UPnP—see the Service Support Screen.

ALLNET

ALL6500

Status ▾ | Storage ▾ | Network ▾ | Accounts ▾ | System ▾ | Language

LAN 1
LAN 2
Service
FTP
iTunes

guration

	ALLNET_6500
Domain Name	allnet.de
DHCP	⦿ Disable ○ Enable
MAC Address	00:14:FD:10:04:CC
IP	192.168.1.100
Netmask	255.255.255.0
Gateway	192.168.1.1
DNS Server	192.168.1.1

Apply **Cancel**

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LAN 2 Configuration

The ALL6500 supports a second network connection for higher service availability and performance. To configure the second network connection, choose **LAN 2 f**rom the **Network** menu.

MAC Address	Shows the MAC address of the LAN2 network interface.
IP	Specifies the IP address of the LAN2 network interface.
Netmask	Specifies the Network Mask of the LAN2 network interface.
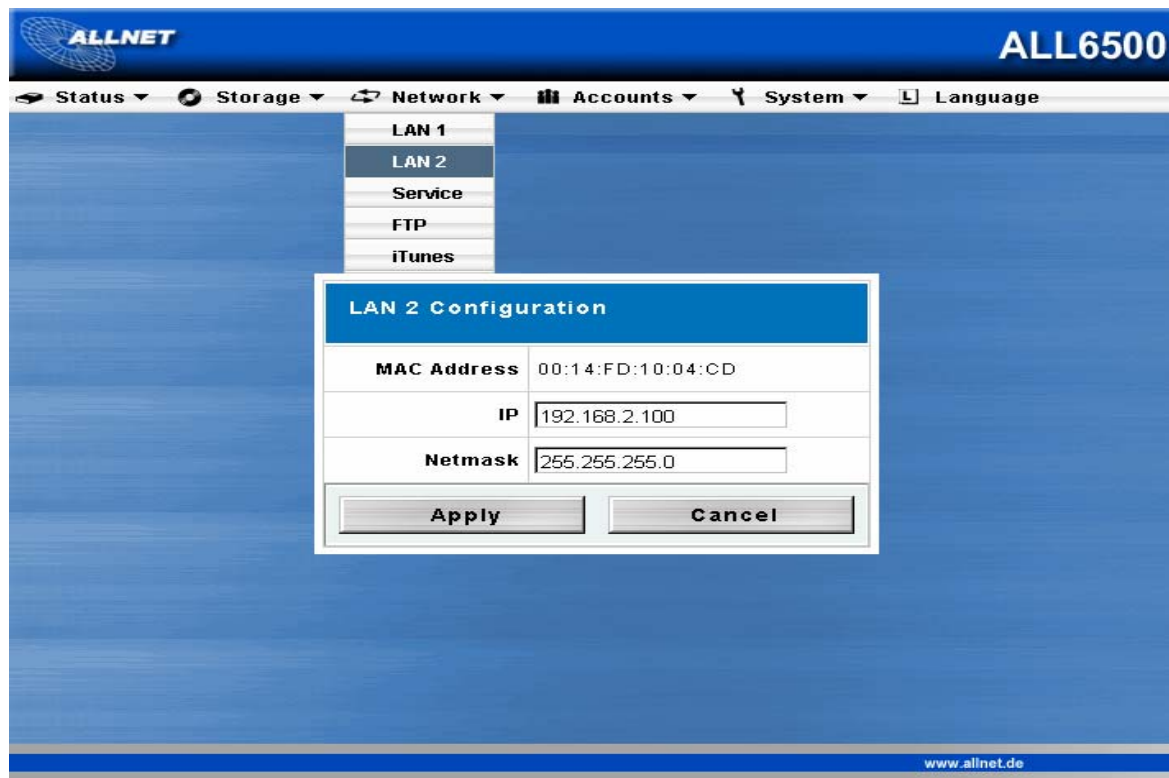
Configure Network Services

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

WebDisk Support	Enable or disable WebDisk support. Enter the port number if this option is enabled.
Secure WebDisk Support	Enable or disable secure **WebDisk** support. Enter the port if this 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 theALL6500.
Net Neighborhood Settings	Specify WIN Server IP address and domain name. If enabled, users may access the ALL6500 by its network name

Note 1: Disable HTTP support and Enable Secure HTTP support to guarantee secure access.

Note 2: In some environments, due to security concerns, you may wish to disable SMB/CIFS as a precaution against computer viruses.

FTP Server Setup

ALL6500 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 Service Setup** screen appears.

You may enable or disable FTP Service from here. If enabled, you must choose an FTP Encoding method. Available options are BIG5, HZ, ISO, EUC-JP, and UTF-8.
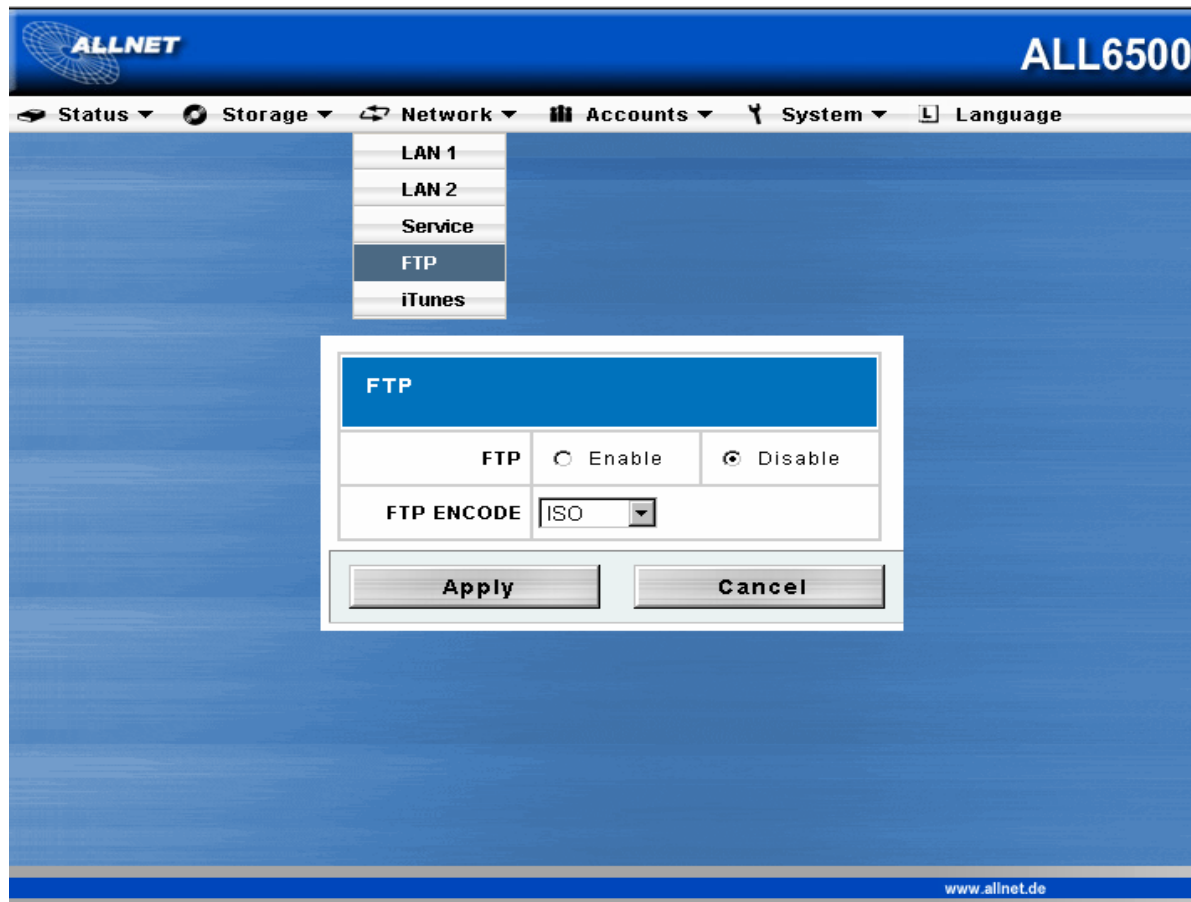
iTunes® Server Setup

With the build-in iTunes® server capability, the ALL6500 enables digital music to be shared and played anywhere! From the **Network** menu, choose the **iTunes** item, and the **iTunes Setup** screen appears. You may enable or disable iTunes Service from here. Once enabled, you must enter correct information for each field.   See the following table for a detailed field description. Press **Apply** to save your configuration.

iTunes	Enable or disable iTunes Service.
Server Name	Name used to identify the ALL6500 to iTunes clients.
DB Name	Name of the iTunes database.
Password	Client password to access the iTunes Service.
Time Scan	iTunes clients scan time in seconds.
Rescan Interval	Rescan interval in seconds.
MP3 Tag Encode	Specify tag encoding for MP3 files.
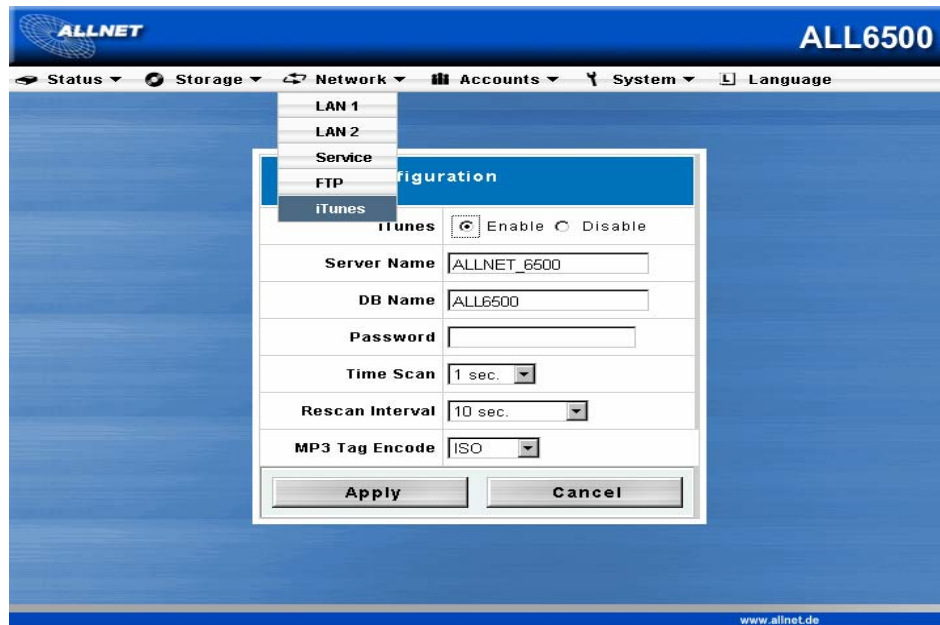
User and Group Management

The ALL6500 has built-in user database that allows administrator to manage user access using different group policies.

User Management

From the **Accounts** menu, choose the **Users** item, and the **Local User Configuration** screen appears. This screen allows you to configure local user settings. If you change any of these items, press **Apply** to confirm your settings. See the following table for a detailed description of each item:

List of All Users	Lists all existing users.
Membership	Select a user from All users and each group they belong to appears here.
List of All Groups	Lists all existing groups.
<<Join / Leave >>	Select a user and a group and press **Join** to add the user to the group or select a group in Members and press **Leave** to remove a user from the group.
User Name	Enter a new user in this box.
Password	Enter a password for the new user.
Confirm	Confirm the password for the new user.
ADD / DEL	After entering a user name, a password and a confirmed password, press the **Add** button to add the user to the List of All Users; or select a user from the list and press **Del** to delete the user from the List of All Users.
Change User Password	Click this to change the user password.

How to Add a User

1. In the **Users** screen, enter a name in the **User Name** box.
2. Enter a password in the **Password** box and re-enter the password in the **Confirm** box.
3. Press the **Add** button and the user is added to the List of All Users.

How to Remove a User

1. In the **Users** screen, select a user name from the **List of All Users**.
2. Press the **Del** button to delete the user from the **List of All Users**.

How to Change a User Password

1. In **Users** screen, press the **Change User Password**, and **Change User Password** screen appears.
2. Enter a new password and re-enter to confirm. Press **Apply** to save your changes.

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Status ▾   Storage ▾   Network ▾   Accounts ▾   System ▾   Language

Users
Groups

Local User Configuration

List of All Users   **Membership**   **List of All Groups**

karl
kevin
joey
jennifer
silvia

users

<<   >>

User Name: silvia   **Password:**   **Confirm:**

Add   Del   Change User Password

Apply   **Cancel**

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User Groups

From the **Accounts** menu, choose **Groups** item, and the **Local Groups Configuration** screen appears. This screen allows you to make local group settings. Press **Apply** button to confirm your settings. See the following table for a detailed description of each item:

List of All Groups	Lists all existing user groups.
ADD / DEL	Enter a group name and press **Add** to add the group to the **List of All Groups**, or select a group from the list and press **Del** to delete the group from the **List of All Groups.**

How to Add a Group

1. In the **Groups** screen, enter a group name in the box next to **Add**.
2. Press **Add** to add the name to the **List of All Groups**.

How to Delete a Group

1. In the **Groups** screen, select a group name from the **List of All Groups**.
2. Press **Del** to delete the name from the **List of All Groups**.

Status ▼   Storage ▼   Network ▼   **Accounts ▼**   System ▼   Language

Users

Groups

Local Group Configuration

List of All Groups

```
users
friend
family
```

[_____] Add   Del

Apply   **Cancel**

Additional System Settings

Use the **System** menu to configure system administration functions.

Notification Configuration

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

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	Set the server hostname/IP and 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 password	Confirm a new password.
Receiver's Email Address	Add one or more recipient's email addresses to receive email notifications.

System Logs

From the **System** menu, choose the **Logs** item and the **System Logs** screen appears. This screen lets you configure and manage system logs, which provide a history of system usage.   See the following table for a detailed description of each item:

Truncate All Log File	Clear all log files.
I<< < > >>I	Use 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.

ALLNET

ALL6500

Status ▾   **Storage ▾**   **Network ▾**   **Accounts ▾**   **System ▾**   **Language**

System Menu
Notification
Logs
Time
Config Mgmt
Factory Default
Firmware Upgrade
Administrator Password
Reboot & Shutdown
⊡ **Logout**

System Logs

Log File

2005/09/30 10:52:27 ALLNET_all6500 all6500: {add share Karl success}

2005/09/30 10:17:47 ALLNET_all6500 syslogd 1.4.1: restart.

|<<	<	>	>>|

[1] INFO   WARN   ERROR

The number of lines per page 10   Go   Ascending   Descending

Download All Log File

Time Settings

From the **System** menu, choose the **Time** item and the **Time screen** appears. Set the desired date, time and time zone. You are allowed to you change any of these items and press **Apply** to confirm your settings. See the following table for a detailed description of each item.

Date	Sets the system date.
Time	Sets the system time.
Time Zone	Sets the system time zone.

.
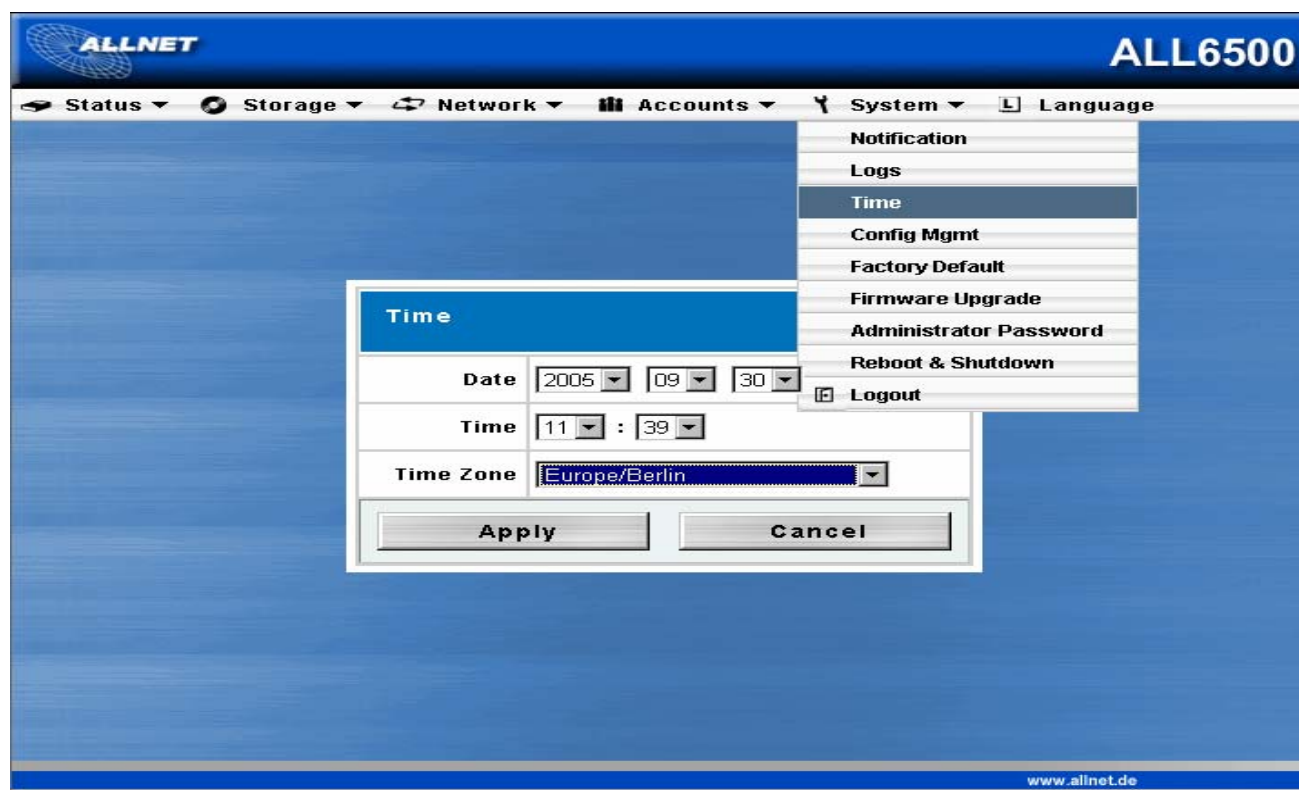
System Configuration Backup & Restore

From the **System** menu, choose the **Config Mgmt** item and the **System Configuration Backup/Restore** screen appears. You can download or upload system configurations. See the following table for a detailed description of each item.

Download	Save and export current system configurations.
Upload	Import a saved configuration file to overwrite current system configurations.
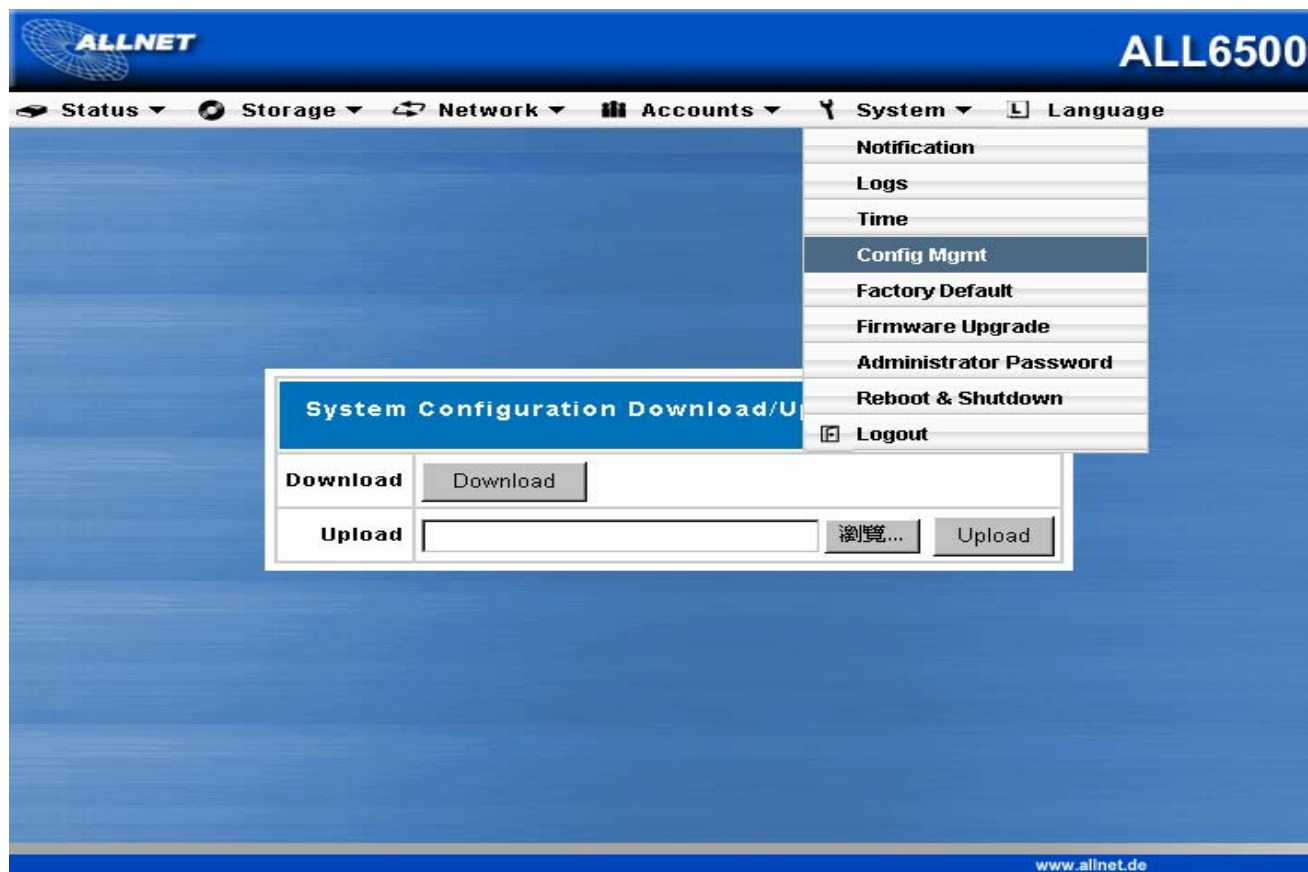
Reset to Factory Default Settings

From the **System** menu, choose the **Factory Default** item and the **Reset to Factory Default** screen appears. Press **Apply** to reset the ALL6500 to factory default settings.

WARNING! Resetting to factory defaults will not erase the data stored in the hard disks but will change all the settings to the factory default values
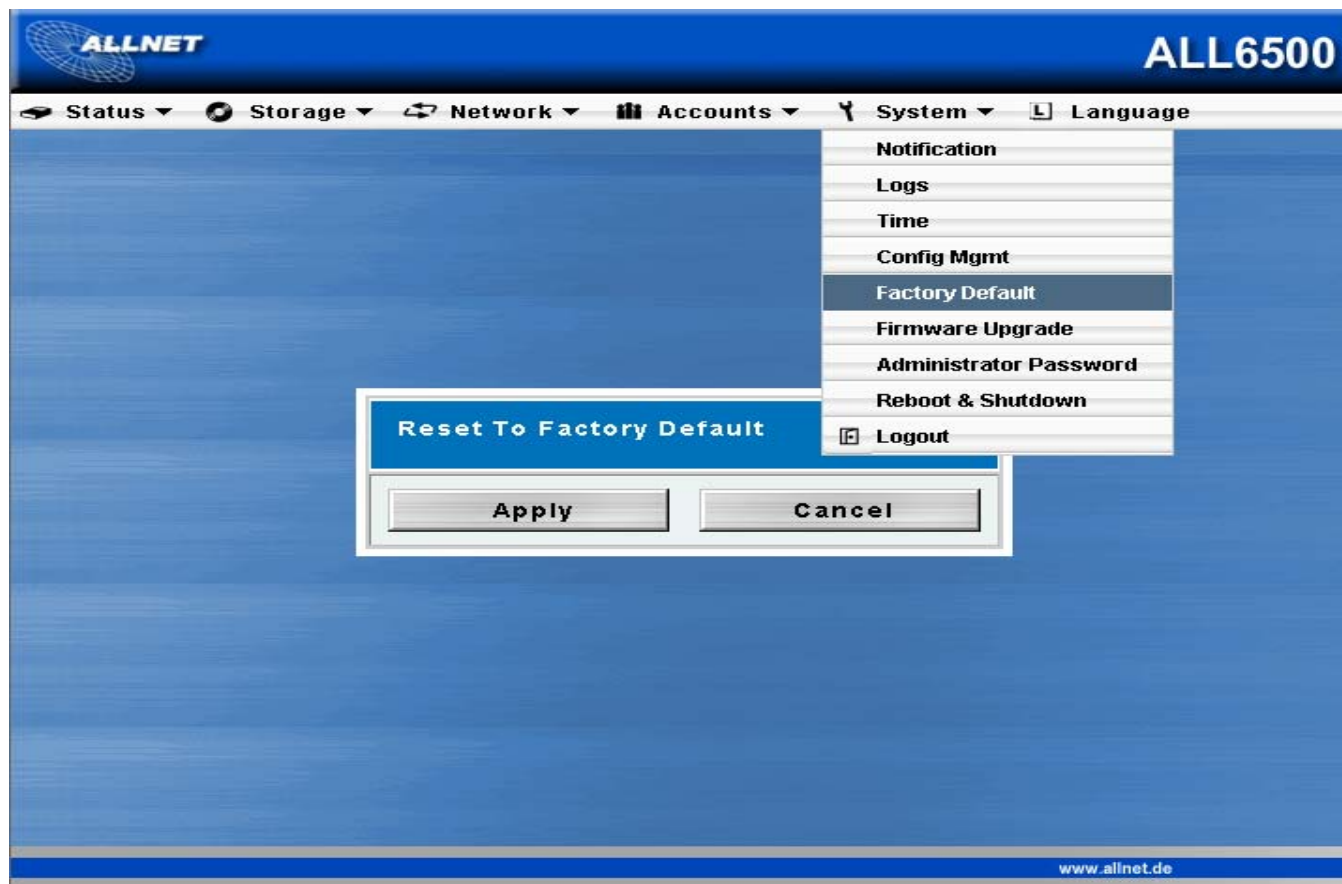
Upgrading System Firmware

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

How to Upgrade Firmware

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

*Note: The beeper only beeps if it is enabled in the **System Notification** menu.*

.

Change Administrator Password

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

New Password	Type in the new administrator password
Confirm Password	Type the new password again to confirm.

Shutdown and Reboot 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.
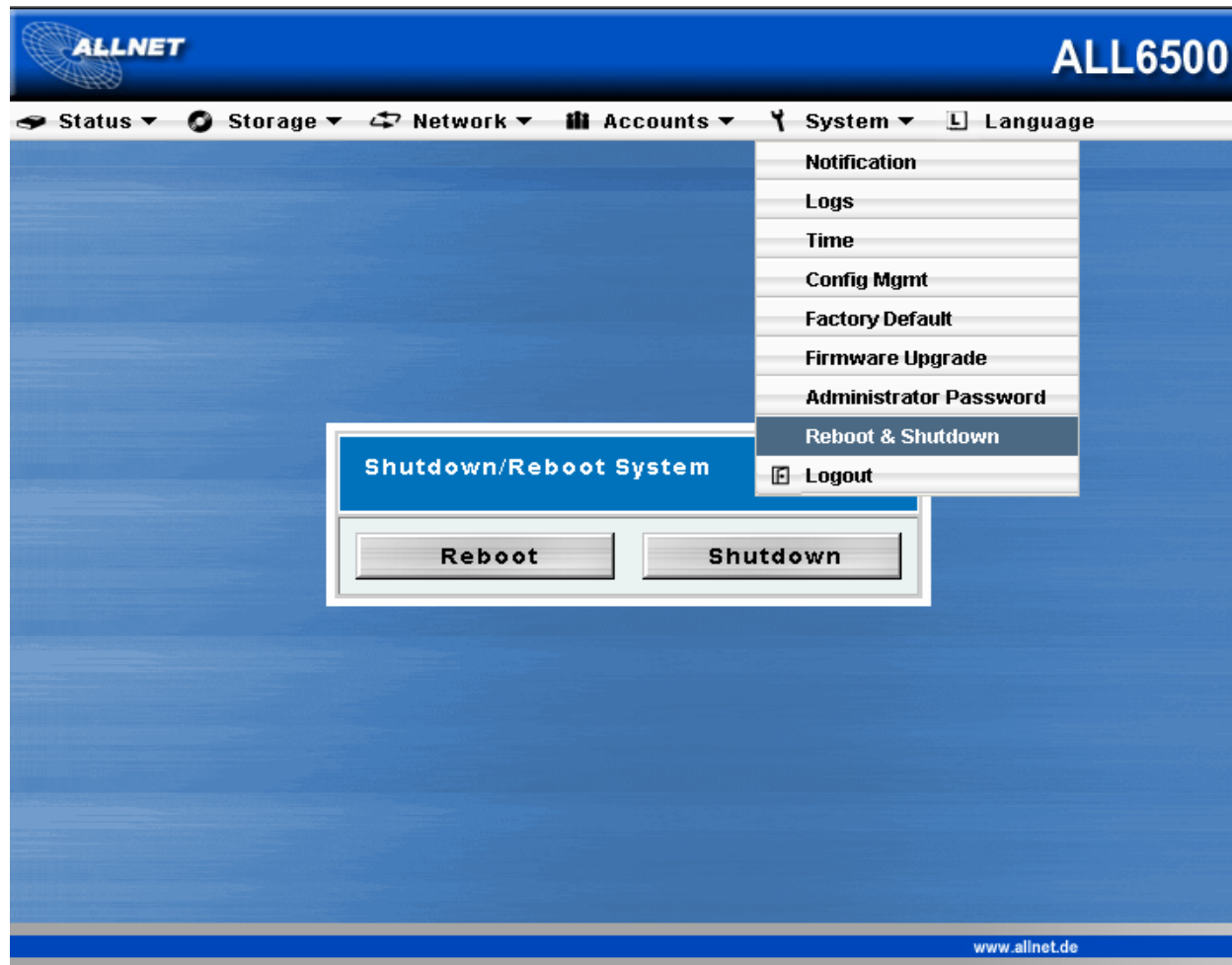
Logout

To logout of System Web Management, choose **Logout** from **System** Menu.
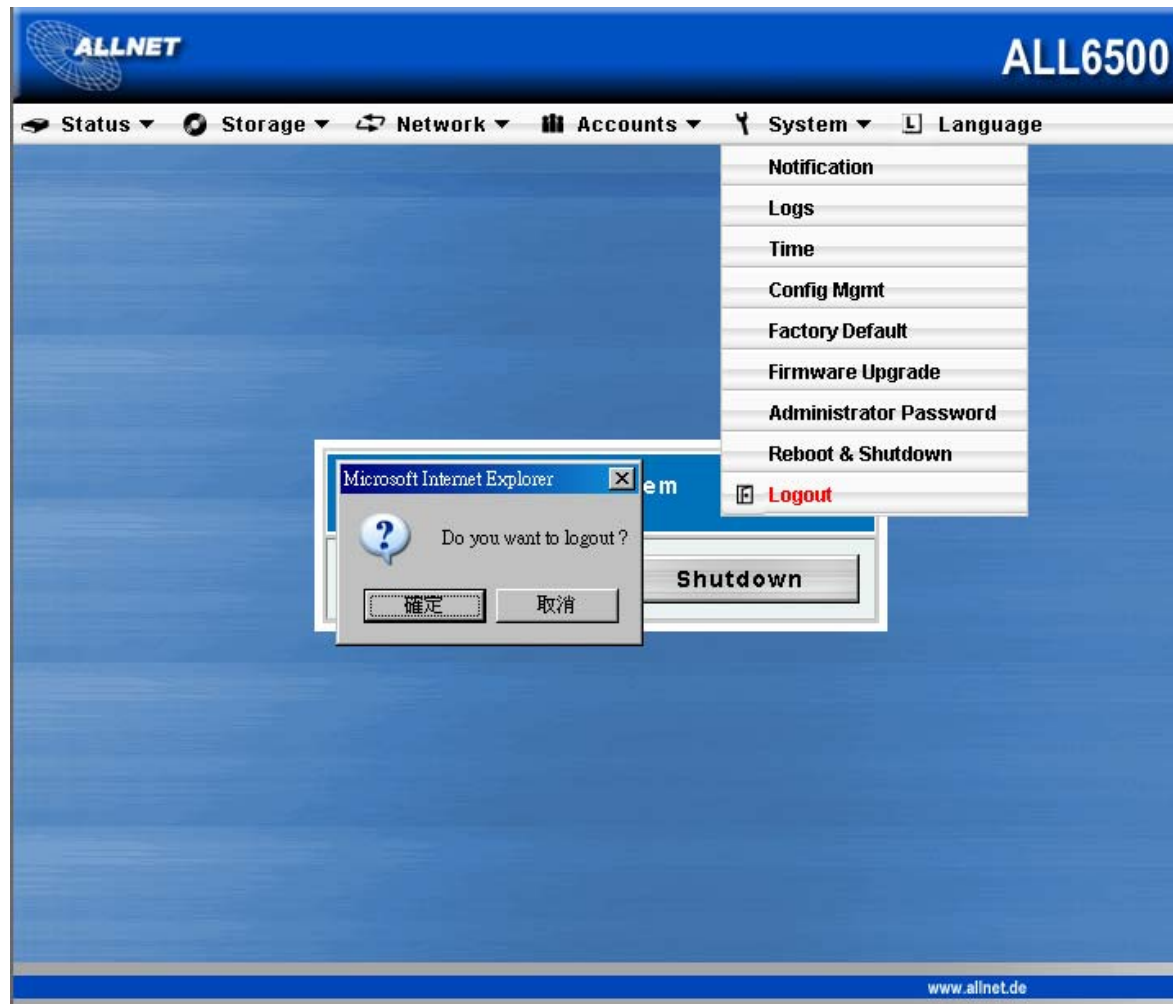
Language Selection

The ALL6500 supports multiple languages.   Choose the **Language** menu and the **Change Language** screen appears. This screen arrows you to select preferred language for the system menu. Press **Apply** to confirm your selection.
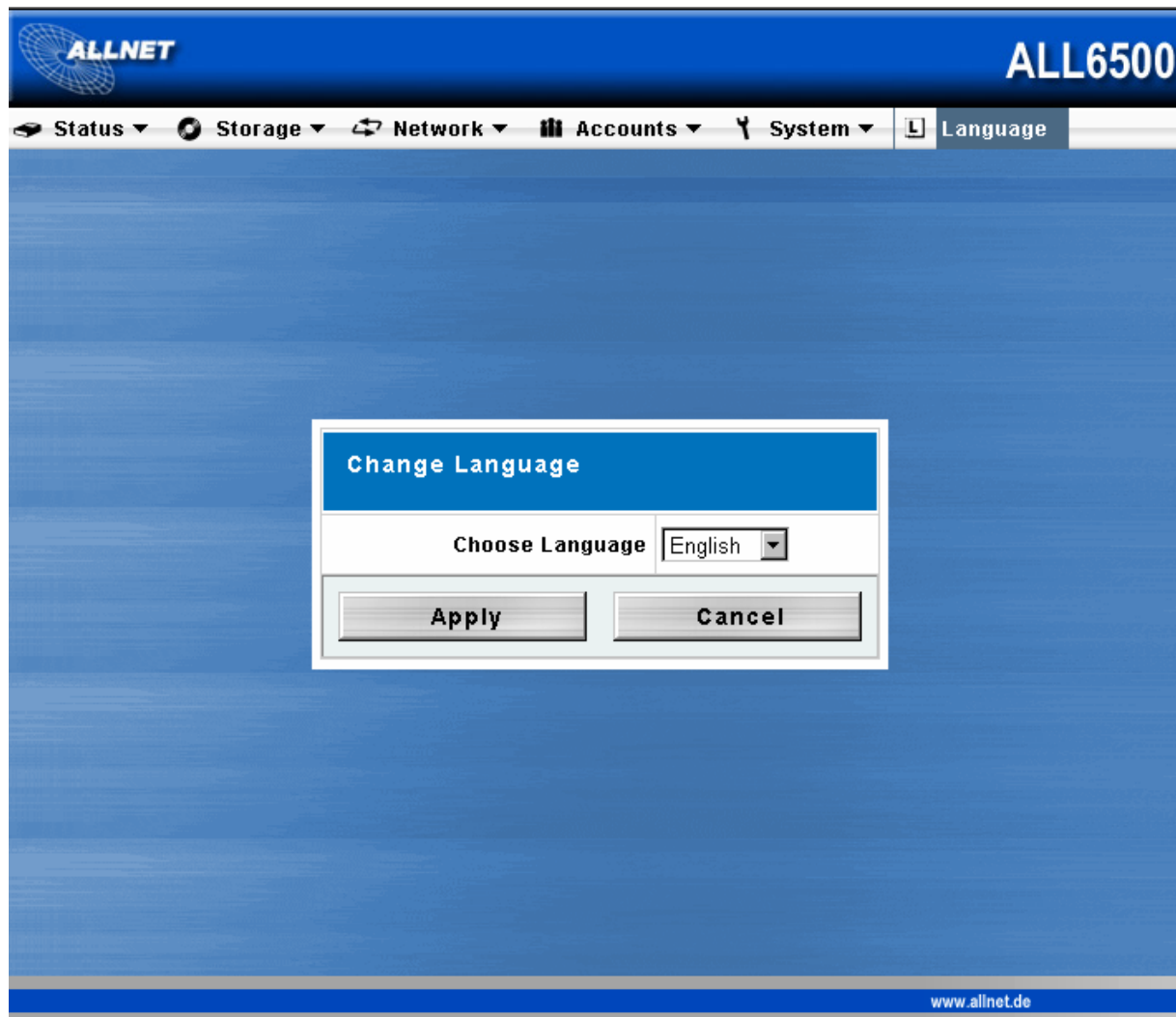
Chapter 3. How to Use ALL6500

Once the ALL6500 is setup and in operation, users on the network may manage all varieties of digital music, photos, or files using their web browser. To manage your personal files or access public files on the ALL6500, just point your browser to the 's IP address.

Manage Files & Folders

To access public files, music or photos on the ALL6500, click on the **WebDisk**, **Music,** or **Gallery** buttons respectively. To manage your WebDisk, Music, or Gallery files, you must first login.

WebDisk Setup

To manage your WebDisk files and folders, click the **WebDisk** button from the left panel.

You will see all existing files and folders as well as files types, size, and last modified date.

To manage any files or folders, you must first select the item with its check box.

To see files and folders from the Hard Disk, USB Disk, or USB Copied Data Folders:

Back: Move up to the parent folder.

Delete: Delete the selected files or folders.

Sort: Arrange all files and folders by type, name, size, or last modified date.

File Search: Search for any specific files or folders.

Page Up/Down: See previous or next page.

Create a New Folder: Enter a new folder name and press the **Create** button.

Upload Files / Folder: Browse to the desired file location and press the **Upload** button.

ALLNET

ALL6500

WebDisk

/

Hard Disk   **USB Disk**   **USB Copied Data**

File Search [ ]

Type	File Name ⬆	Size	Modified Date
📁	Karl		2005/09/30 10:52:24
📁	iTunes		2005/09/22 11:41:05
📁	usbcopy		2005/09/22 11:41:05
📁	usbhdd		2005/09/22 11:41:05

1/1   1   Move to 1 ▼ page Go

iTunes® Server Setup

To manage your digital music and share it with iTunes clients on the network, click on the **Music** button from the left panel.

You will see all existing music files as well as files types, size, and last modified date.

To manage any music files, you must first select the item with its check box.

Create a New Folder: Enter a new folder name and press the **Create** button.

File Search: Search for any specific files or folders.

Upload Files / Folder: Browse to the desired file location and press the **Upload** button.

Back: Move up to the parent folder.

Add: Add new music files to the iTunes folder.

Edit: Edit selected music file name.

Delete: Delete the selected files or folders.

Sort: Arrange all files and folders by type, name, size, or last modified date.

Page Up/Down: See previous or next page.

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ALL6500

WebDisk

/iTunes

| | Hard Disk | | USB Disk | | USB Copied Data |

File Search [   ]

☐	Type	File Name ⬆	Size	Modified Date
☐	♪	02.Fly away.mp3	4,342 KB	2005/09/30 14:46:57

1/1   1   Move to [1 ▼] page [Go]

New Folder [   ]   **Upload** [   ] [瀏覧...]

Photo Gallery Setup

To manage your photo gallery or see other photo albums, click on the **Gallery** button from the left panel.

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 with its check box.

<u>**Manage Your Album and Photos**</u>

Make Cover: Make selected photo your cover picture.

Back: Move up to the parent folder.

Add: Add a new album or photos.

Edit: 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.

Delete: Delete the selected albums or photos.

Page Up/Down: See previous or next page.

Note: To prevent system errors, the ALL6500 sets the following limitations on photo files:

- Each file upload is limited to a size of 2MB. Files exceeding 2MB 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)

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ALL6500

Gallery > **karl's album**

jennifer   karl

1

To manage photos within each album, you must first open the album by click on it.
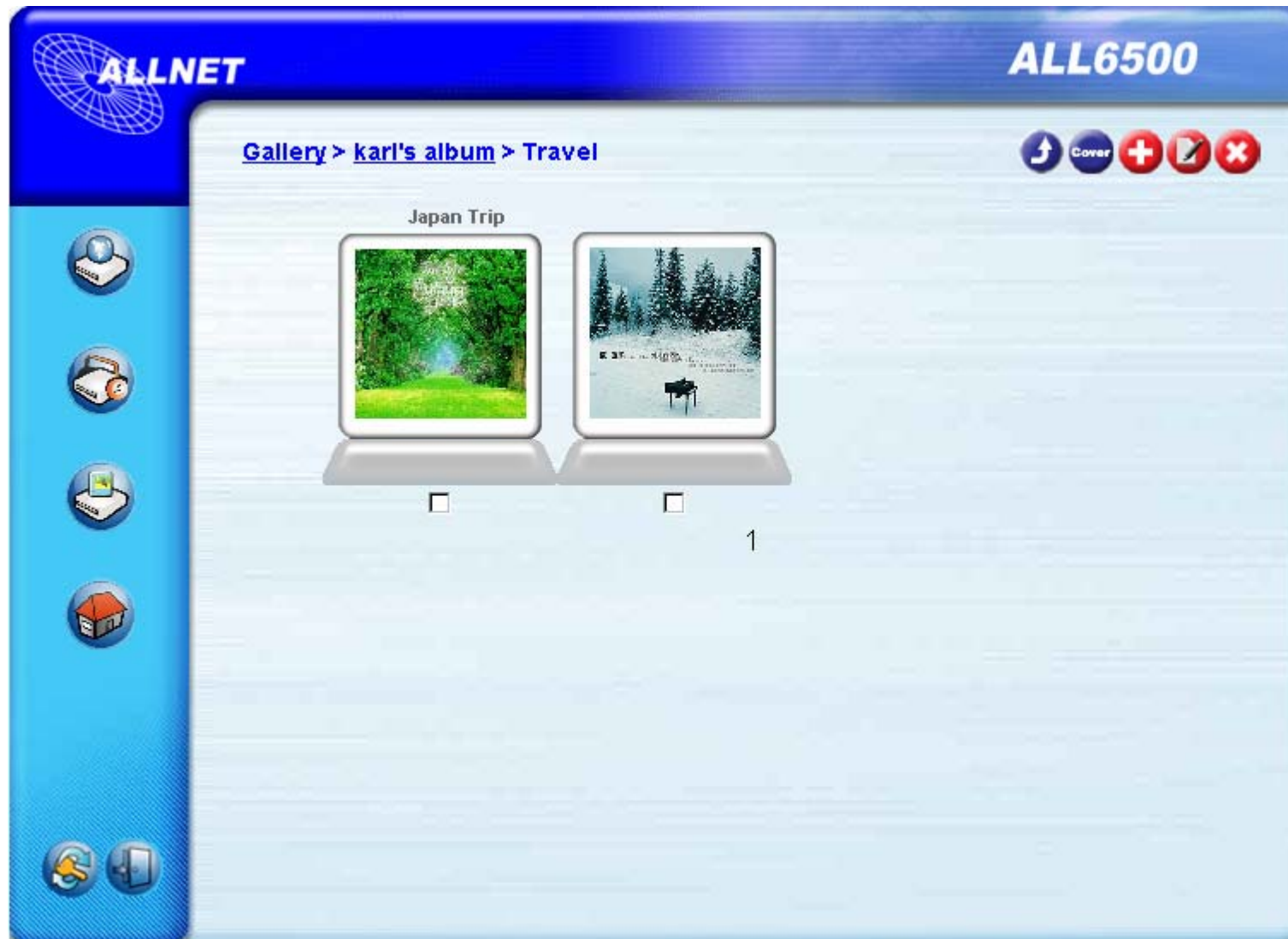
To see an enlarged photo, click on the individual photo. Browse through each photos using the forward and backward buttons.

USB Storage Expansion

ALL6500 supports external USB hard disks through its three USB ports. Once a USB hard disk has successfully mounted, the entire volume will be copied automatically to the default USB HDD folder, The ALL6500 supports up to 6 USB external storage devices. All file names on USB disk volume are case sensitive.

Mapping the Client PC to the ALL6500

Mapping a Network Drive (Windows)

You can map share folders on the ALL6500 so that you can access them through the My Computer folder in Windows. You can connect to the shared network folders on the ALL6500 as follows:

1. Go to the **My Documents** folder in Windows.
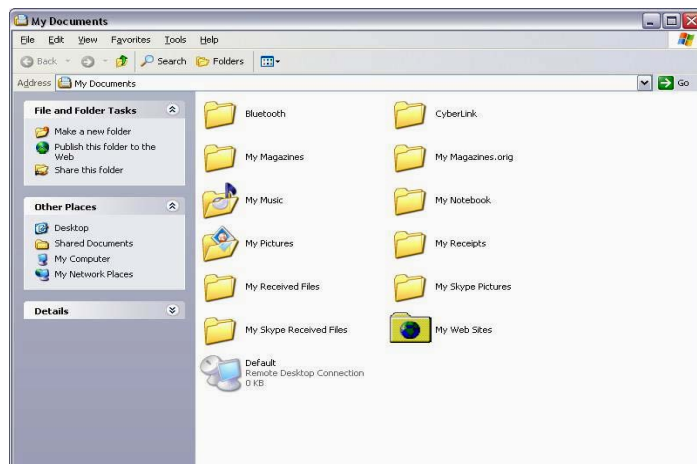
2.   In the menu bar, select **Tools** and then **Map Network Drive…**
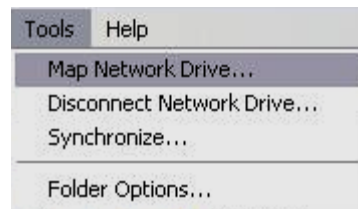
3.   The Map Network Drive window appears.

4.   Assign a drive letter for the share folder.

5.   Use the **Browse** button to find the folder over your network. Alternatively, you may enter the folder name you wish to connect to or its IP address.

6. Click **Finish**. When the **Connect As…** window appears, enter a User name and Password.

7. Click **OK**. The share folder appears as the drive you assigned in your My Computer window. You can now access this folder as though it were a drive on your computer.
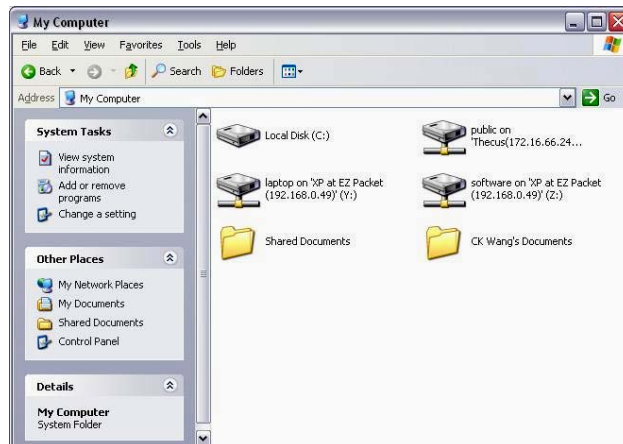
Mapping a Network Drive (Apple OS X)

For most shared computers or servers you can locate and connect using the **Finder Network** browser. If you can't locate the computer or server, you may be able to find it by typing its network address in the **Connect to Server** dialog.

Network Addresses

A network address is the protocol followed by the DNS name and any additional pathname for the computer. You can also use the IP address for the computer rather than its DNS name.

Windows

To connect to SMB/CIFS (Windows) servers and shared folders, type the DNS name using one of the following:

smb://DNSname/sharename

smb://IPaddress/sharename

You can also use the computer name. If you don't specify the shared folder as part of the address, you can choose it after you enter your user name and password.

Connecting to a Server

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

1. Choose **Go** > **Connect to Server**.
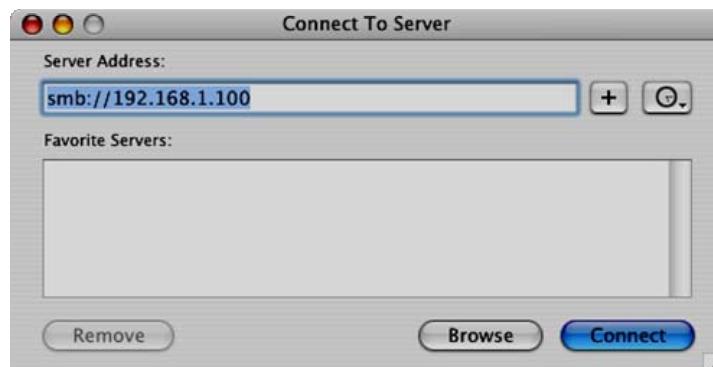
2. Enter the network address for the server in the Server Address text box and click **Connect**.
   The screen to the right shows a network address for SMB/CIFS (Windows) servers and shared folders.

   Add a computer or server to your Favorites list by clicking the **Add (+)** button. You can choose a recently connected server from the Recent Servers pop-up menu. You can also double-click computers you have added to the Favorites list.

3. Follow the onscreen instructions to enter your user name and password and select server volumes or shared folders. The screen to the right shows SMB/CIFS File system Authentication for Windows.

4. Press OK and the SMB Mount (Windows) screen appears.
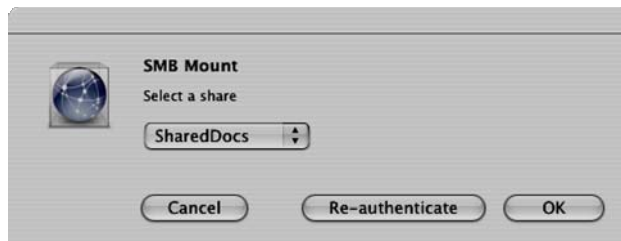
5. Select a share and press OK. The selected share appears.
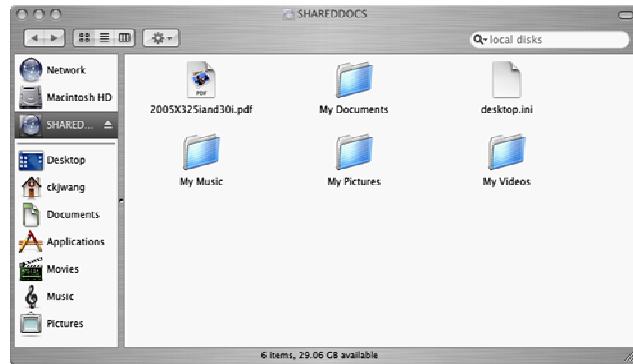
File Backup

Windows XP Data Backup

If you use Windows XP Professional, the Windows Backup utility (Ntbackup.exe) is ready to use.

Installing the Windows XP Home Edition Backup Utility

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.
2. When the Welcome to Microsoft Windows XP screen appears, click **Perform Additional Tasks**.
3. Click **Browse this CD**.
4. In Windows Explorer, double-click the **ValueAdd** folder, then **Msft**, and then **Ntbackup**.

5. Double-click **Ntbackup.msi** to install the backup utility.

Using Windows Backup Utility

By default, the backup utility uses a wizard. To begin backup:

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 ALL6500 as your backup destination and click **Next**.

6. Click **Next** to display the wizard's final page and click **Finish** to start backing up.
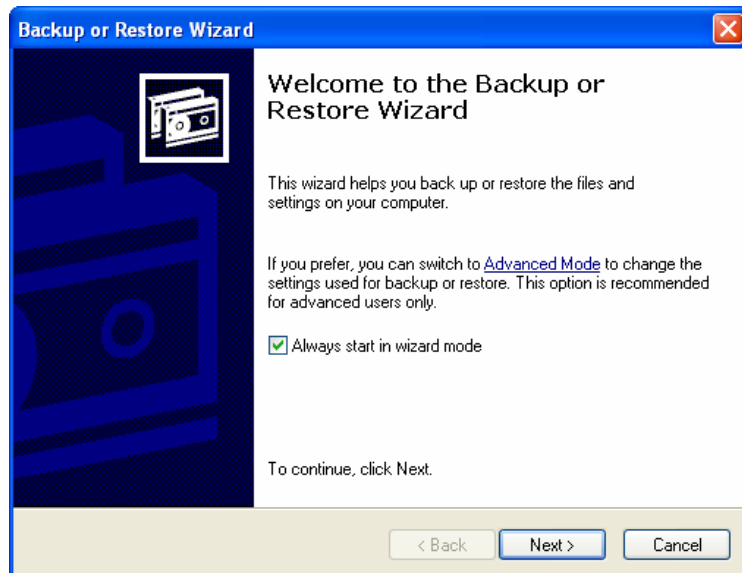
Mac OS X Backup Utilities

The 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".

Appendix A : Troubleshooting Guide

This appendix covers troubleshooting, including error detection and how to deal with a damaged hard drive.

Forgotten Network IP Address or Password

If you forget your network IP address or your password, you can reset the ALL6500 to its default settings as follows:

1. Power on the ALL6500 and immediately press and hold the Reset button for 10 seconds.

2. This resets the   to its default IP address and password settings.

3. Make sure your network is connected to the Internet and access the   Login webpage.

4. Type in the default IP address http://192.168.1.100 in your browser'. The Login screen appears.

Note: *To access any IP address, your computer must be configured with the correct IP settings. See Appendix B for more information.*

5. Type in the factory default administrator user name and password.

   User Name: *admin*

   Password: *admin*

6. Press Login.

7. Reconfigure your password and IP settings in the   system management software.

Error Detection

There are three ways the system detects an error and lets you know there is a problem.

1. The Error LED on the bottom left of the system's Front Panel glows red.

2. The Access/Error LED on the bottom right of a hard disk drive glows a steady red.

Note: Each hard disk drive has two LEDs on its right front. The top LED is for power and the bottom LED shows either access or error.

3. A beeping sound from the system means the same as the Error LED.

Solving Problems

When the system detects an error as above:

1. Login to the ALL6500 browser based software.
2. Go to the **System** menu and choose the **Logs** item.
3. The System Log screen appears.
4. Click the Error button and all recorded errors appear. These log entries help you diagnose the problem. Most errors are due to improper use of the device or hard drive damage. If hard drive damage is the problem, see the section that follows.
5. If you are unable to solve the problem, please contact your dealer.

Power LED	Blue: System power on
System Status LED (!)	Blinking orange: System startup Blinking red: System error Off: System startup complete; system operating normally
HDD 1 LED (blue/red) (+)	Blue: HDD 1 detected Blinking blue: Active HDD 1 data transfer Red : HDD 1 error detected Blinking red: HDD 1 capacity is nearly full (90% or more) * If RAID is configured, capacity is based on the entire RAID system.

HDD 2 LED (blue/red)	Blue: HDD 2 installed
	Blinking blue: Active HDD 2 data transfer
	Red: HDD 2 error
	Blinking red: HDD 2 capacity is nearly full (90% or more)
	* If RAID is configured, capacity is based on the entire RAID system.
One-Button USB Copy	Push the button to copy entire USB volume to theALL6500. Files are stored in a folder named by current time stamp: (YearMonthDayHHMM)
LAN 1 LED (green)	Green: Network connected
	Blinking green: Network activity
LAN 2 LED (green)	Green: Network connected
	Blinking green: Network activity
USB LED	USB Device Connection:
	Blinking blue (5 seconds) : USB device connected successfully.　*For universal USB memory card reader, USB LED will blink blue when one or more card is mounted successfully.
	Blinking red (5 seconds) : USB device connection failure
	Data Transfer:
	Blinking blue: Active data transfer
	Blinking red: USB device read/write error

Appendix B: RAID Basics

This appendix includes basic information about RAID and RAID settings.

RAID Introduction

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 Configuration

IP StorageALL6500 supports both RAID 0 and RAID 1.   RAID system divides data into smaller pieces (stripe) and saves these small pieces on two different hard disks for better performance and protection against single hard disk failure.   To setup RAID on your system, you must configure stripe size and the type of RAID you wish to use.
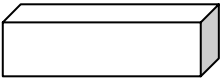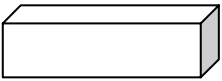
Stripe Size

The system writes data 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 and are interleaved sequentially.

Term	Definition
Stripe Width	The number of hard disk drives that are striped to. In a RAID with four hard disks the stripe width is four.
Stripe Size	The length of the interleaved data segments written across multiple hard disks.

Example:

Configure four hard disk drives as RAID 0 and the data is striped in segments. Segment One writes to HDD 1, Segment Two writes to HDD 2, and so on as below:

		Segment One
HDD 1		Segment Five
		Segment Nine
		Segment Two
HDD 2		Segment Six
		Segment Ten

Choosing a RAID Level

The ALL6500 supports standard RAID levels 0 and 1. 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 and its pros and cons:
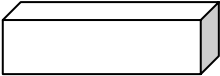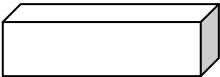
RAID	Application	Pros	Cons	No. of HDDs	Fault Tolerant
0	Best suited for non-critical data that requires high performance. **Description:** Data is divided into blocks and sequentially distributed.	High performance for large files	If any HDD fails, all data is lost	1~32	No
1	Best suited for read-intensive fault-tolerant systems. **Description:** Data is duplicated on	Excellent Data Security	Half the hard disk space available. Performance	2	Yes

	another HDD (mirroring).		impaired during rebuild.		

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.

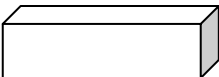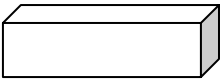RAID 0 uses disk striping and breaking up data into blocks to write across all hard drives in the volume. The system can then use multiple hard drives for faster read and write. The stripe size parameter that was set when the RAID was created determines the size of each block. No parity calculations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

HDD 1		Segment One Segment Five Segment Nine
HDD 2		Segment Two Segment Six Segment Ten

RAID 1

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

HDD 1		Segment One Segment Two Segment Three

		Segment Four
HDD 2		Segment One Mirrored
		Segment Two Mirrored
		Segment Three Mirrored
		Segment Four Mirrored

Appendix C: Product Specifications

Hardware Specifications		
Core Processors	Processor	Intel IOP 600MHz
	Wired interface	2 x 10/100/1000 Mbps Ethernet Port
	Wireless Interface (Optional)	Wireless 802.11b/g
	SATA Controller	2 * SATA interface
Memory	System	DDR 128MB
Mass Storage	HDD	2 x bays of 3.5" SATA HDD Single capacity supported 80/120/160/200/250/300/400GB above
Power System	Adapter	AC 100~240Volt, 50/60Hz
System	LED	Power LED, System LED, Network LED x 2 Hard drive LED, x 2 USB one copy button LED
Physical/Mechanical	Dimensions	160(W) mm ×85(H) mm ×200(D) cm
Function Specifications		
Disk Modes	RAID	Spanning (RAID 0) Mirroring (RAID 1)

		Expansion (JBOD)
Multimedia Support	iTunes® Server	Supported Music Types: AAC, MP3, WAV
	Personal Photo Web Server	Enables system users to create their own personal photo web server
Data Access	Client OS Support	Windows 98/ME/NT/2000/XP UNIX/Linux (by SMB/CIFS) Apple OS X (by SMB/CIFS)
	Web Disk	Web-based network disk
	SMB/CIFS	SAMBA 3
	FTP	File transmission protocol
User Authentication	Local User	Supports built-in user accounts
Administration	Windows client program	Server management utility program
	Web-based administration	Web-based server management interface
	Email notification	Send the system messages via Email to the system administrator
Authorization	Supports authorization of data access by setting Read, Write and Deny options on individual users or groups.	

CE-Kennzeichnung und EG-Konformitätserklärung

Für das folgend bezeichnete Erzeugnis:

ALL6500 NAS DiskServer

CE-Kennzeichnung

Dieses Gerät erfüllt die Anforderungen der EU-Richtlinie:

89/336/EG   Richtlinie über elektromagnetische Verträglichkeit und die gegenseitige Anerkennung ihrer Konformität.

Die Konformität mit der o.a. Richtlinie wird durch das CE-Zeichen auf dem Gerät bestätigt.

EG Konformitätserklärung

Hiermit wird bestätigt, dass das ALLNETALL6500 NAS DiskServer den Anforderungen entspricht, die in der Richtlinie des Rates zur Angleichung der Rechtsvorschriften der Mitgliedstaaten über die elektromagnetische Verträglichkeit (89/336/EG) festgelegt sind.

Zur Beurteilung des Erzeugnisses wurden folgende Normen herangezogen:

EUROPEAN STANDARD EN 55022:1994/A1:1995/A2:1997 Class B,
EN 61000-3-2:2000, EN 61000-3-3:1995/A1:2001 und EN 55024:1998/A1:2001
(IEC 61000-4-2:1995, IEC 61000-4-3:1995, IEC 61000-4-4:1995,
IEC 61000-4-5:1995, IEC 61000-4-6:1996, IEC 61000-4-8:1993,
IEC 61000-4-11:1994)

Diese Erklärung wird verantwortlich für den Hersteller/Bevollmächtigten abgegeben:

ALLNET Computersysteme GmbH
Maistr. 2
82110 Germering

Die Konformitätserklärung kann unter der oben genannten Adresse oder im Internet unter
http://www.allnet.de/ce-certificates/ eingesehen werden.