

DNS-1200-5 Version 1.00

ShareCenter Pro[™]

User Manual

Business Class Networking

Table of Contents

Introduction	1
Product Overview	2
Package Contents	
System Requirements	
Features	
Hardware Overview	4
Front Panel	4
Rear Panel (Connections)	5
Using the OLED	6
Installation	7
Hardware Setup	
·	
Configuration	
Easy Search Utility	
Getting Started	
Web UI	15
Homepage	20
System Wizard	21
Create User	
Create Share Folder	
My Favorites	
Status	
System Status	
Hard Drive Status	
Disk Management	
Volume	

iSCSI Target	53
Virtual Volume	56
Disk Diagnostic	58
Account Management	62
Admin Password	63
Users	64
Groups	78
Share Folders	81
System Management	88
Network	89
Time and Date	93
System Settings	94
Power Management	95
Email Alerts	97
Firmware Upgrade	98
Log Settings	99
Network Services	101
File Sharing	102
Dynamic DNS	110
SNMP	111
Network Discovery Services	112
Applications	113
Web File Manager	114
Download Manager	115
Backup	118
Volume Snapshot	119

i

D-Link ShareCenter Pro 1200 User Manual

Local Backup	123
Remote Backup	126
External Backup	
Extension Pack	134
Extension Pack	135
Knowledge Base	136
What is RAID?	136
Mapping a Drive	139
USB Print Server	
iSCSI Drive Mapping	150
Hot-swap Function	159
Storing non-English Character Files	160

Introduction

The D-Link ShareCenter Pro 1200 (DNS-1200-05) Unified network storage addresses the ever-growing data storage requirements for SMB users. The need for data consolidation and data sharing make this enclosure an ideal solution. Small and medium businesses looking for a central storage location for sharing or backing up data. SMBs will appreciate the ease of use of the NAS file server feature as well as the fast access performance of iSCSI. The ShareCenter Pro 1200 is a hybrid NAS/iSCSI storage enclosure, which offers concurrent NAS/iSCSI functionality. In addition, the ShareCenter Pro 1200 has a rich set of SMB features for the small and medium business-minded user.

The included CD contains D-Link's Easy Search Utility. This utility allows you to locate the ShareCenter on the network and map drives to your computer. Backup software is also included on the CD. This software allows you to backup your files from a computer to the ShareCenter manually, by a schedule, or in real-time. Real-time backups are a great way to safeguard against unfortunate accidents that may result in the loss of important files.

Combining ease of use with rich set of SMB features, the ShareCenter Pro 1200 is a great solution for any small and medium business environment. Centralize and manage your data the way you want, and keep it safe with the ShareCenter Pro 1200 Unified network storage!

1

Product Overview Package Contents

- D-Link ShareCenter Pro 1200
- CD-ROM with Manual and Software
- Quick Installation Guide
- Power Cord
- Cat5 Ethernet Cable
- Front Panel Lock Key



- **Note:** Using a power supply with a different voltage than the one included with the ShareCenter will cause damage and void the warranty for this product.
- **Note:** The ShareCenter Pro 1200 should only be maintained by the authorized server manager or IT administrator. The ShareCenter Pro 1200 should be locked using the Front Panel Key. Only certified staff who have the Key are allowed to unlock it.

If any of the above items are missing, please contact your reseller.

System Requirements

For best results, the following minimum requirements are recommended on any system used to configure and use the ShareCenter:

- Computer with: 1Ghz processor / 512 MB RAM / 200 MB available space / CD-ROM drive
- Internet Explorer version 6.0 or Mozilla Firefox 1.0 and above
- Windows[®] XP (with Service Pack 2) or Vista[™]
- 3.5" SATA Hard Drive(s)

Features

The ShareCenter Pro 1200 Unified network SMB packed with a wide variety of features geared toward the small and medium business environment. Some of these features are listed below:

- **Five** 3.5-inches SATA Standard Drive with capacity support up to 2 TB
- 2 Gigabit Ethernet ports
- 2 USB 2.0 ports
 - UPS, printer, and external storage support
- Concurrent iSCSI/NAS: Offering solutions for supporting both file sharing by NAS function and access performance by iSCSI block device
- Data Protection: Supports RAID 0/1/5/5+Spare/6/ JBOD and S.M.A.R.T. disk diagnostic.
- Ease of Use: iSCSI targets appear as a local drive on your client PC. Access NAS files via the easy-to-use web file manager.
- Accessibility: Share files across the network or over the Internet via FTP or the web file manager.
- Security: Create users, groups, and iSCSI targets with password authentication.
- Account management: Manage users/groups and Read/Write permission
- iSNS
- Virtual Disks
- Thin-provisioning
- DDNS
- Volume Snapshot
- Up to 64 iSCSI Targets
- SNMP (D-View 6.0 compatible)

- CHAP
- Link Aggregation
- Fail-over/Fail-back
- VLAN tag Support
- DFS Support
- AES Support
- FTP / FXP w/ TLS/SSL
- NFS
- ADS support
- Backup
 - Remote backup
 - Local backup
 - External backup
 - PC client to NAS backup
- Web File Manager
- Print server
- Scheduled downloads from web or FTP sites.
- Power management to conserve energy and extend hard drive life.
 - Schedule power on/off
 - Hard disk hibernation
 - SMART for hard disk health scan
 - D-Link Green Ethernet

Hardware Overview Front Panel



COMPONENT	DESCRIPTION
Front Panel Lock	Turn key to up position to unlock. Turn key to left position to lock.
OLED Screen	This screen displays detailed information about the following: System Information, HD Volume Information and Error Messages
Next Button	Use this button to display the System Information, HD Volume Information, and Error Messages on the OLED. Press the button once to alternate between the different Status screens.
Drive Trays	Use the screws to fasten the SATA hard drives with the trays and insert to the ShareCenter.
Power Button	Use this button to switch the device on or off. To switch on the device press the button once. To switch off the device hold the button down for 5 seconds.

Rear Panel (Connections)



COMPONENT	DESCRIPTION
Gigabit Ethernet Port	Use the Gigabit Ethernet Port to connect the ShareCenter to the local network.
Power Receptacle	Connect the supplied power cord to the receptacle.
USB Connector	Two USB 2.0 (Type A) connectors. The USB Host ports are for Print Servers, USB memory disks or USB UPS monitoring.
Reset Button	Press this button for more than 5 seconds to reset the unit to factory defaults.
Cooling Fan	The cooling fan is used to cool the hard drives and feature speed control. When the unit is first powered on the fans rotate at a low speed and rotate at a high speed when the temperature rises above 36 °C.

Using the OLED

The ShareCenter features an OLED that enables the administrator to easily view information about the ShareCenter. The OLED display screen displays the system information, hard drive volume information and error messages. The OLED has three different screens:

- **System Information** This screen shows the following information:
 - The hostname of the ShareCenter
 - The IP address of the ShareCenter
 - The hard drive slots information
- **Hard Drive Volume information** This screen shows the following information:
 - The percentage of space used on the hard drives.
- **Error Messages** This screen shows error messages when there is any system failure.

Press the **Status** button once to alternate between the different **Status** screens.

LED Indicator Lights

On each hard drive tray there are 2 LED indicator lights. The meaning of the LED colors are shown below:

Hard Drive Tray LED Lights	Color	Status	Description
Top LED	Blue	Static	Disk is powered on and operational
Bottom LED	Green	Blinking	Disk is being accessed
Bollom LEB	Red	Static	Disk has failed or is offline

Installation Hardware Setup

Follow the instructions below to install a hard drive, connect to the network and power on the ShareCenter. Open the shipping carton for the ShareCenter and carefully remove and unwrap its contents. Follow the instructions below to setup the ShareCenter. If this is the first time using the ShareCenter or if a new hard disk is installed, use the Easy Search utility located on the Installation CD and follow the instructions for setting up, configuring and formatting the new drive.

To install ShareCenter on your local network, refer to the steps below:

- 1. Put a 3.5" SATA hard drive into a drive tray and use screws to fasten the hard drive with the tray. There are four holes for fastening the screws. Two holes are circled in red in the image, and the other two holes are on the other side of the drive tray.
- 2. Open the faceplate to access the drive bays.



3. Insert the tray into a bay.



4. Depress the blue button to lock it into place.



5. Connect an Ethernet cable to the available Ethernet port. This cable should connect the ShareCenter to your local network via a router or switch, or directly to a computer for configuration.



6. Connect the supplied power adapter to the power receptacle.



Configuration Easy Search Utility

When first powered on, during the initial boot sequence, the ShareCenter will wait to be assigned an IP address via DHCP. If it does not receive a DHCP assigned IP address, by default it will have a self-assigned IP address in the range of 169.254.0.0 to 169.254.255.255. It is recommended to use the included D-Link Easy Search Utility when accessing and configuring the ShareCenter for the first time. If you want to change the IP address before logging in or are unable to connect to the ShareCenter IP address, you can use the Easy Search Utility provided on the product CD to locate the device on your network and make any needed changes.

•	
Network Storage Device	The Easy Search Utility displays any ShareCenter devices it detects on the network here.
Refresh	Click Refresh to refresh the device list.
Configuration	Click Configuration to access the Web based configuration of the ShareCenter.
LAN	Configure the LAN Settings for the ShareCenter here.
Apply	Click Apply to save changes to the LAN Settings.
iSCSI Drive Mapping	Displays the available iSCSI targets on ShareCenter.
Connect	Click Connect to connect to the iSCSI target.
Management	Click Management to edit the information.
Drive Mapping	Volumes available for mapping are displayed here.
Available Drive Letters	Choose an available drive letter. Click Connect to map the selected volume. Click Disconnect to disconnect the selected mapped volume.
About	Click About to view the software version of the Easy Search Utility.
Exit	Click Exit to close the utility.



Getting Started

To run the Easy Search Utility, insert the ShareCenter CD into your CD-ROM drive:



Select the listed ShareCenter and click the **Configuration** button. This will launch the computer's default web browser and direct it to the IP address listed for the device. Make sure the browser is not configured to use a proxy server.

Note: The computer used to access the ShareCenter web-based configuration manager must be on the same subnet as the ShareCenter. If your network is using a DHCP server and the computer receives IP settings from DHCP server, the ShareCenter will automatically be in the same subnet.





Note: The computer, used to access the ShareCenter web-based configuration, manager must be on the same subnet as the ShareCenter. If your network is using a DHCP server and the computer receives IP settings from DHCP, the ShareCenter will automatically be in the same subnet.

Web UI

The ShareCenter Web UI defaults to the Create Volume page, if no volume has been created. Once a volume has been created, the web UI defaults to the Homepage ((f)). The main categories for configuration are located in the folders at the left of the page. Click the folder icon to see the categories of the folder. The categories available for configuration include:

- **Homepage-** Contains the System Wizard, Create User, Create Share Folder and My Favorites.
- **Status-** Contains the System Status and Hard Drive Status.
- **Disk Management-** Allows the ShareCenter administrator to create/configure a Volume, iSCSI Target, Virtual Volume, and perform Disk Diagnostic.
- Account Management- Allows the ShareCenter administrator to configure Admin Password, Users, Groups and Share Folders
- **System Management-** Contains Network, Time and Date, System Settings, Power Management, Email Alerts, Firmware Upgrade and Logs.
- **Network Services-** Contains File Sharing, Dynamic DNS, SNMP and Network Discovery Services.
- **Applications-** Contains Web File Manager and Download Management.
- Backup- Contains Volume Snapshot, Local Backup, Remote Backup and External Bakup.
- Extension Pack- Allows the ShareCenter administrator to add more applications to the device.

These pages and their configuration options will be discussed in detail in the following pages of this manual.

Note: After logging in to the ShareCenter for the first time it is recommended to add a password to the admin account.











Homepage

This page contains the System Wizard, Create User, Create Share Folder and My Favorite. Click the M (Homepage) icon to see the subcategories. This window provides quick access to the Setup Wizard and the My Favorites section. Users can add the most frequently used functions to My Favorites and quickly access these functions by clicking the icon or selecting from the M (My Favorites) drop-down list.



System Wizard

The ShareCenter has a System Wizard that allows you to quickly configure some of the basic device settings. Click the **System Wizard** icon to start the Setup Wizard.



	System Wi	izard 🛞
	LAN 1	
	 DHCP Client Static IP IP Address: Subnet Mask: Jumbo Frame: Gateway: 	192:168:0.32 255:255:255:0 Disabled 192:168:0.1
	VLAN	
This window can configure the LAN 1 settings.	VLAN: VLAN ID:	O Enable O Disable
	Port Bonding	1
	Port Bonding: Option:	Enable Disable Round Robin
		Previous Next Cancel
		Click Next to continue.

	System W	izard 🛞
	LAN 2	
This window can configure the LAN 2 settings.	 DHCP Client Static IP IP Address: Subnet Mask: Jumbo Frame: Gateway: VLAN VLAN: VLAN ID: 	192.168.1.32 255.255.0.0 Disabled 192.168.1.1
		Previous Next Cancel Click Next to continue.

	System W	izard	8
	Host Name		
Enter the host name of the ShareCenter.	Host Name:	dlink-570412	
	DNS Server		7.
Enter the primary and secondary DNS server	Primary DNS:	192.168.69.1	201
address in the fields.	Secondary DNS:		
	Default Gate	eway	
Use the drop-down menu to select the LAN interface.	Gateway:	LAN 1	
		Click Next to continue.	
		Cher Here to continue.	







LAN 1 Network Type: Static IP IP Address: 192.168.0.32 Subnet Mask: 255.255.255.0 Jumbo Frame: 1500 Gateway: 192.168.0.1 VLAN: Disable Port Bonding: Disable Port Bonding: Disable Network Type: DHCP Clent IP Address: 192.168.1.32 Subnet Mask: 255.255.05 Jumbo Frame: 1500	System Wiza	rd	8
Image: Proceeding of the second of the se	LAN 1		
Gateway: 192.168.1.1 VLAN: Disable	Network Type: IP Address: Subnet Mask: Jumbo Frame: Gateway: VLAN: Port Bonding: LAN 2 Network Type: IP Address: Subnet Mask: Jumbo Frame: Gateway:	192.168.0.32 255.255.255.0 1500 192.168.0.1 Disable Disable Disable DHCP Client 192.168.1.32 255.255.0 1500 192.168.1.1	





Create User

The Create User wizard icon directly links to the Create User function.



	Create User
Enter a name in User Name , and a password in Password and Confirm Password .	User Information User Name: Password: Confirm Password:
If setting a specific storage quota for the user, tick the Set Quota check box and enter the storage quota in megabyte (MB).	Quotas Set Quota Quotas: MB
	Previous Next Cancel
	Click Next to continue.






Create Share Folder

The Create Share Folder wizard icon directly links to the Create Share Folder function.



	Create Share Folder	8
	Volume Path	+3
Click the Select Path field to choose the path of a folder.	Select Path:	
	Share Folder Options	
	Oplocks: O Enable O Disable	
Click the radio buttons to configure the folder options.	Map Archive: O Enable O Disable	
	Recycle Bin: O Enable O Disable	
If setting a specific storage quota for the share folder, tick the Set Quota check box and enter the storage quota in megabyte (MB).	Quotas Set Quota Quotas: 0 MB	
	Previous Next Cancel Click Next to continue.	

My Favorites

Click the (Homepage) icon to see the My Favorites field at the lower half of the window. To add a category in My Favorites, click an arrow key next to a folder icon to display all categories within the folder in the left window, and drag the category to the My Favorites field. To delete a category in My Favorites, drag the category in My Favorites field to the left window. Once the category is added to My Favorites, click the icon to see the category in the list. Click to directly link to the window of the category.



Status

This folder contains the System Status and Hard Drive Status. Click the folder to see the subcategories.



System Status

Click the System Status icon in the Status window or the System Status link in the left window to view System Status.

Basic Information	Displays the model name, current firmware version and current temperature of the ShareCenter.
LAN Info	Displays the local network settings of the ShareCenter
Network Settings	Displays the host name, and DNS information of the ShareCenter
Date and Time	Displays the current date and time settings of the ShareCenter.
USB Disk Information	Displays information for a connected USB printer, memory disk or UPS. Click the Unmount button to remove the device from the ShareCenter.

Basic Information	
Model Name: Current Firmware Version: System Temperature:	ShareCenter Pro 1200 1.00b12 28°C/82°F
LAN 1 Information	
MAC Address: IP Address: Subnet Mask: Gateway:	00:60:42:57:04:12 192:168:0:32 255:255:255:0 192:168:0:1
LAN 2 Information	
MAC Address: IP Address: Subnet Mask: Gateway:	00:60:42:57:04:13 192:168.1.32 255:255:255:0 192:168.1.1
Network Settings	
Host Name: Primary DNS: Secondary DNS: Default Gateway:	dlink-570412 192.168.69.1 192.168.0.1
Date and Time	
Current Time: Current Time Zone: Up Time:	01:19:27 02/01/2010 (GMT) Greenwich Mean Time : Dublin, Edinburgh, Lisbon, London 0 day(s) 2 hour(s) 30 minute(s)
USB Disk Information (Right P	▲
Manufacturer. Product: Size:	USB 2.0 Flash Disk Unmount 0.98 CB
Detail:	USBDisk1_1 File System: VFAT Unused size: 181.05 MB

Hard Drive Status

This window displays the Vendor, Model name, Temperature, and Size of the Hard Disks installed in the ShareCenter, along with the slot they are installed in. You can view the S.M.A.R.T. information for each hard disk installed in the ShareCenter (if the hard disk supports the S.M.A.R.T. feature).

Hard Drive To see the S.M.A.R.T. information of a hard disk, select a hard disk and click the **Details** button.

Slot	Vendor	Model	Temperature (°C/°F)	Size
1	Western Digital	WDC WD6402AAEX	28/82	596.17 GB
2	Hitachi	Hitachi HDP725050	27/81	465.76 GB
3	Western Digital	WDC WD3000HLFS	24/75	279.46 GB
4	Western Digital	WDC WD5000AVJS	28/82	465.76 GB
5	-	-	-	-

D T Informati

S.M.A.R.T. The S.M.A.R.T. test results for the selected hard drive is displayed. Click the **Close** button to go back to the Hard Drive Status window.

Name	Now	Worst	Thresh	Value
Raw Read Error Rate	200	200	41	0
Spin Up Time	175	173	17	4208
Start Stop Count	100	100	0	185
Reallocated Sector Ct	200	200	140	0
Seek Error Rate	200	200	0	0
Power On Hours	100	100	0	297
Spin Retry Count	100	100	0	0
Calibration Retry Count	100	253	0	0
Power Cycle Count	100	100	0	95
Power-Off Retract Count	200	200	0	85
Load Cycle Count	200	200	0	99
Temperature Celsius	91	85	0	56
Reallocated Event Count	200	200	0	0
Current Pending Sector	200	200	0	0
Offline Uncorrectable	200	200	0	0
UDMA CRC Error Count	200	200	0	0
Multi Zone Error Rate	200	200	0	0

Disk Management This folder contains the Volume, iSCSI Target, Virtual Volume and Disk Diagnostic. Click the folder to see the subcategories.



Volume

Click the Volume icon in the Disk Management window or the Volume link in the left window to view and edit the volumes.

The ShareCenter supports six different volume configuration types: Standalone, JBOD, RAID 0, RAID 1, RAID 5 and RAID 6.

Create	Click this button to create a new volume.
--------	---

- **Delete** Click this button to delete a volume.
- **Extend/Spare** Click to enlarge a volume by replacing one of the existing hard drives with a larger capacity hard drive, or set a spare for a volume
 - Migrate Click to change the RAID level of a volume.
 - **Expand** Click to enlarge a volume by replacing one of the existing hard drive with a larger capacity hard drive.
 - Unlock Click to unlock an encrypted volume
 - **Encryption** Click to configure the encryption settings of the volume.
- Auto Rebuild Click to enable or disable the auto-rebuild function.

Volume	Level	State	Encryption	Disk(s)	Used Size / Total Size
Volume_1	RAID 5	Normal	Enabled, Unlock	1, 2, 3, Spare (4)	197.7 MB / 548.15 GB
Volume_50	Standalone	Normal	Disabled	1	194.83 MB / 311.73 GB
Volume_51	Standalone	Normal	Disabled	2	187.45 MB / 183.37 GB

Create a new Volume

Click the **Create** button to see the following window.

- **Standalone** Standalone requires only one hard drive in the array. Each hard drive is its own volume.
 - **JBOD** JBOD requires a minimum of two hard drives, concatenates the hard drives in a linear fashion, and creates one large volume geared towards maximum available space.
 - **RAID 0** RAID requires a minimum of two hard drives. The data is stored in a striped fashion and geared towards maximum available space and performance. CAUTION: RAID 0 does not provide data

redundancy.

- **RAID 1** RAID 1 requires a minimum of two hard drives and mirrors the hard drives for data redundancy.
- **RAID 5** RAID 5 requires a minimum of three hard drives and provides data striping with distributed parity.
- **RAID 6** RAID 6 requires a minimum of four hard drives, and stripes data and double-parity information across all of the member drives.
- Array Tick the check box to select the corresponding hard drive to be part of the volume.
- **Spare** Tick the check box to select the corresponding hard drive as a spare for the volume.

Click Next to continue.

Create Volume

RAID Level

Single hard drive.
Concatenate hard drives.
Disk array with best performance.
Mirror disk array.
Disk array with single fault tolerance.
Disk array with double fault tolerance.

Disk(s)

Array	Spare	Disk	Size
		Disk 1	596.17 GB
		Disk 2	465.76 GB
		Disk 3	279.46 GB
		Disk 4	465.76 GB

Auto-rebuild	Click the radio buttons to enable or disable auto- rebuild setting. Only RAID 1, RAID 5 and RAID 6 can configure this setting.	Create Vo	olum
Encryption	Click the radio buttons to enable or disable encryption settings.	Settings	
Password	When encryption is enabled, enter a password in the field. A minimum of 5 digits is required.	Auto-rebuild:	O Er
Confirm Password	Retype the password in the field.	Encryption: Password:	O Er
Auto Unlock	Tick the check box to automatically unlock the volume when the system starts.	Confirm Password: Auto U	Inlack
USB Key	Tick the check box to save the password to a USB drive.	USB Ke	ey lock: Enc
Click Apply	to continue.	system sta • USB Ke unlock enc to the NAS	y: Store th rypted vol



A warning message appears before starting to create the volume.

Click Yes to continue.



The volume is being created. The status bar displays the percentage of completion in real time. Once the volume is created successfully, the Volume window appears.



Extend/Spare a Volume

Click a volume and the **Extend/Spare** button to see the following window.

- Array Tick the check box to extend the volume.
- **Spare** Tick the check box to select the disk to be a spare disk.
- Disk Displays the configured disk number.
- **Size** Displays the size of the hard disk.

Click **Apply** to save the settings.

Array	Spare	Disk	Size
	V	Disk 4	465.76 GB

Migrate a Volume

Click a volume and the **Migrate** button to see the following window.

The windows allows you to change the RAID level of the volume. Choose a RAID level and select the hard disks to be used in the migration.

Click **OK** to save the settings.

2	Volume		(
	evel		
O JBOD		Concatenate hard drives.	
O RAID 0		Disk array with best performance.	
O RAID 1		Mirror disk array.	
O RAID 5		Disk array with single fault tolerance.	
O RAID 6		Disk array with double fault tolerance.	
Disk(s)			
	Disk	Size	
Array	Disk Disk 1	Size 279.46 GB	
Array			
Array	Disk 1	279.46 GB	
Array	Disk 1 Disk 2	279.46 GB 596.17 GB	
Array	Disk 1 Disk 2 Disk 3	279.46 GB 596.17 GB 465.76 GB	

Expand a Volume

Click the **Expand** button to see the following window.

Click Yes to continue.



Follow the instruction in the State column to expand the volume.

Volume	Level	State	Encryption	Disk(s)	Used Size / Total Size
Volume_1	RAID 1	Expand, Insert a larger disk now.	Enabled, Unlock	3	191.05 MB / 274.08 GB

Change the Encryption Settings

Click the **Encryption** button to see the following window.

The Encryption window appears and there are four tabs in the window. This window displays the settings in the **Change** tab.

- ChangeTick the check box and enter the
new password in New Password
and Confirm Password fields.
- Auto Unlock Tick the check box to automatically unlock the volume when the system starts.
 - **USB Key** Tick the check box to save the password to a USB drive.

Click **Apply** to save the settings.

Encryption			8
Change Save	Load	Mail	
Change Password			
New Password: Confirm Password:			7
Auto Unlock			
USB Key			
	Apply	Cancel	

This window displays the setting in the **Save** tab.

Click **Save** to save the password to local.



This window displays the settings in the **Load** tab.

Load Click the Browse button to locate the path of the password password that is saved to the local computer. from local

Click the Load button to get the password from local.

Encryp	tion				8
Change		Load	Mail	Browse	
	6	Load	Car	ıcel	

This window displays the setting in the **Mail** tab.

Click Mail to send the password to administrator.



iSCSI Target

Click the **iSCSI Target** icon in the Disk Management window or the iSCSI Target link in the left window to configure the iSCSI target.

iSCSI Manager

Click the **iSCSI Manager** tab to see the following window.

- Enable iSCSI Tick the check box to enable the iSCSI function. Target
- **Enable iSNS** Tick the check box to enable the Internet Storage Name Service function.
- iSNS Server Enter the iSNS server IP address in the field.

Click **Apply** to save the settings.



iSCSI Targets

Click the **iSCSI Targets** tab to see the following window. An iSCSI target shares its storage capacity with the iSCSI initiator.

Create Click the button to add a new target.

- Edit Select a target and click the button to change the settings.
- **Delete** Select a target and click the button to remove the target from the list.

Create Edit Delete				
Target Name	Volume	Size	Status	

Click the **Create** button to see this window.

- Pre-allocate Click the Yes radio button to reserve a certain amount of capacity on the target in advance. Click No that enables thin provisioning to provide just enough storage space for immediate use.
 - Name Enter a name in the text box to identify the new iSCSI Target.
 - **Volume** Use the drop-down list to select the volume for the target.
 - **Size** Specify the size of the iSCSI target in gigabytes.

Create	e iSCSI	Target	8
iscsi	Target Se	ettings	
Pre-alloca	te: 💿 No	◯ Yes	
Name:	iqn.2010-01.co	m.d-link:dlink-570412:	
Volume:	Volume_1		
Size:		GB (191.05 MB / 274.08 GB)	
	Prev	ous Next Canc	el

The CHAP Settings window appears.

- **Enable** If the iSCSI initiator supports Challenge Handshake Authentication Protocol, click the **Yes** radio button. Click the **No** radio button to disable.
- Name If enabling CHAP, enter the CHAP username in the field.
- **Password** If enabling CHAP, enter the CHAP password in the field.

Click **Apply** to save the settings.

Create iSCSI Target

	ame: assword:		
ords.	3334010.		

Virtual Volume

Click the **Virtual Volume** icon in the Disk Management window or the Virtual Volume link in the left window to configure the virtual volume. The Virtual Volume allows the ShareCenter to expand its iSCSI capacity. By utilizing the built-in iSCSI initiator, the ShareCenter will be able to connect to other iSCSI targets on the network and convert them into virtual volumes. These virtual volumes are seen as multiple single volumes on the ShareCenter. Up to 8 virtual volumes can be stacked. The ShareCenter Pro acts as the storage stack master server. Virtual Volumes can be used to store and backup data, just like a local volume.

- Create Click the button to add a virtual volume.
 - Edit Select a target and click the button to change the settings.
- **Delete** Select a target and click the button to remove the virtual volume from the list.
- **Format** When using the virtual volume for the first time, the volume must be formatted before mounting to the ShareCenter.
- **Connect**/ Click **Connect** to link to a virtual volume. Click
- **Disconnect** Disconnect to terminate the connection.



Create a Virtual Volume

Click the **Create** button to see this window.

Device IP	Enter the IP address of the device.
Port	Enter the port for the device.
Search	Click the button to search for the iSCSI targets on the network.
Targets	Displays the available iSCSI targets.
Share Folder	Enter a name for the share folder to access.
Authentication	Click the Yes radio button to enable the authentication function.
User Name	Enter the user name for authentication.
Password	Enter the password for authentication

Click **Apply** to save the settings.

Create Vi	rtual Volume	8
Device IP:	Port: 3260 Search	
Targets:		
Share Folder:		
Authentication: User Name: Password:	⊙ No O Yes	
	Apply Cancel	

Disk Diagnostic

Click the **Disk Diagnostic** icon in the Disk Management window or the Disk Diagnostic link in the left window to configure the Disk Diagnostic. This window is used to run a SMART (Self-Monitoring Analysis, and Reporting Technology) or Scan test. The hard drive is grayed out if it does not support SMART.

- Quick test Click to run a quick SMART test. The test checks the electrical mechanical, and read performance of the hard drive.
- **Extended test** Click to run an extended SMART test. This takes longer time, but checks more thoroughly and complete than the quick test.
 - Schedule Click to configure a scheduled test for the selected hard drive.
 - **Stop** Click to stop a test
 - **Scan** Click to scan if there are any errors or if there is any corruption on the file system.
 - Format Click to format a volume. All data on the volume will be deleted.

Slot	Manufacturer	Model	Schedule	Progress	Result	
1	Western Digital	WDC WD6402AAEX	None	-	Pass	
2	Hitachi	Hitachi HDP725050	None	-		
3	Western Digital	WDC WD3000HLFS	None	-	Pass	
4	Western Digital	WDC WD5000AVJS	None	-	Pass	
5	-		-	-		

Schedule Disk Diagnostic

Click the Schedule button to see this window.

Schedule:	None	-	
Type:	O Quick to	est	Extended test
Time:	00		00
Weekday:	SUN		
Date:	01	-	

- **Schedule** Use the drop-down menu to select the frequency of the self-test schedule.
 - **Type** Click the radio buttons to select the type of the test.
 - **Time** Use the drop-down menu to select hour and minute of the day.
- Weekday Use the drop-down menu to select which day of the week.
 - Date Use the drop-down menu to select a date.

Click **OK** to save the settings.

Section 3 - Configuration

Scan a Volume

Click the **Scan** button to see this window.

Select a volume and click **Scan** to start to check the file system.

Scan	Vol	ume
ooun		GILLIO

Volume	Level	State	Encryption	Used Size / Tot
Volume_1	RAID 5	Normal	Enabled, Unlock	197.7 MB / 548
Volume_50	Standalone	Normal	Disabled	194.83 MB / 31
Volume_51	Standalone	Normal	Disabled	187.45 MB / 18

Format a Volume

Click the **Format** button to see this window.

Select a volume and click **Format** to format the volume.

/olume	Level	State	Encryption	Used Size / Tot
Volume_1	RAID 5	Normal	Enabled, Unlock	197.7 MB / 548
Volume_50	Standalone	Normal	Disabled	194.83 MB / 31
Volume_51	Standalone	Normal	Disabled	187.45 MB / 18

A warning message appears to double confirm if the formatting will proceed. Click **Yes** to proceed.



Account Management This folder contains the Admin Password, Users, Groups and Share Folders. Click the folder to see the subcategories.



Admin Password

Click the **Admin Password** icon in the Account Management window or the Admin Password link in the left window to configure the Admin Password. This window is used to change the administrator's password.

User Name	Displays administrator's user name.
Password	Enter the original password.
New Password	Enter a new password.
Confirm Password	Retype the new password.

Click **Apply** to save the settings.

User Name:	admin		
Password:	aunun		
New Password:	· · · · · · · · · · · · · · · · · · ·		
Confirm Password:			
	4		

Users

Click the **Users** icon in the Account Management window or the Users link in the left window to create, edit or delete users. This window also can assign users to various groups.

Create	Click the button to create a new user.
Edit	Select a user and click the button to configure the
	user's information.

- **Delete** Select a user and click the button to remove the user from the list.
- Import Users Click the button to import a file with a list of users.
- **Create Batch** Click the button to create multiple users at one time.
 - **Search** Enter the search keyword and click sto search for the user. Click to clear the search field and all users' information appears.

reate Edit Delete	Import Users Create Batch	Search
User Name	Group Name	
Users		
1 C Pare 1 of t D D	8	Displaying 1 - 1 of 1
	User Name Users	User Name Users

Create a User

Click the **Create** button to see the welcome window.



Section 3 - Configuration

User Name Enter the name of a user.

Password Enter the password of the user.

Confirm Retype the password.

Password

Set Quota Tick the Set Quota check box to limit the storage capacity in megabyte for the user. The value of 0 means an unlimited quota size.

Create User			selling to	8
User Informati	on			
Password: Confirm Password:				
Quotas				
Set Quota Quotas:	МВ			
	Previous	Next	Cancel	

This window is used to add the user to a group. If there is no entry in the list, you can go to **Account Management** > **Groups** to create a group.

- **Search** Enter the search keyword and click search for the group. Click to clear the search field and all groups' information appears.
 - Add Tick the corresponding check box to add the user to the group.
 - PageDisplays number of pages. You can enter a page
number in the field to jump to the specific page.
Click First Page (▲), Previous Page (▲), Next
Page (▲) or Last page (▲) to search for the group.
- Refresh Click To update the group list.



This window is used to assign access rights to the user for the corresponding share folder(s). If there are no entries in the list, you can go to **Account Management** > **Share Folders** to create share folders.

- Search Enter the search keyword and click sto search for the folder. Click to clear the search field and all folders appear.
- **Read Only** Tick the check box for read only access right.
- **Read/Write** Tick the check box for both read and write access rights.
 - **Deny** Tick the check box for no access right.
 - PageDisplays number of pages. You can enter a page
number in the field to jump to the specific page.
Click First Page (▲), Previous Page (▲), Next
Page (▲) or Last page (▲) to search for the group.
 - **Refresh** Click **W** to update the folder list.

h <mark>are Folder I</mark>	LISL			
			Search	R
Share Name	Path	Read Only	Read/Write	Deny

This window displays a summary of the configured information.

Click **Previous** to modify the settings.

Click **Apply** to save the settings.

ummary		
Options	Settings	
Jser Name	UserName	
Group Name		
Quotas	300 MB	
Share Folder (RO)		
Share Folder (RW)		
Share Folder (Deny)		
Import Users

Click the **Import Users** button to see the welcome window.

Click Next to continue.

Import Users 1. Select the user list file to import. 2. Confirm the import list. Previous Next Cancel

Section 3 - Configuration

This window allows you to import a user list file.

Download	Click this button to see the example for listing the users in the file.	
Overwrite duplicate accounts	Tick the check box to replace duplicate accounts.	
User List File	Click the Browse button to locate the file.	

Import Users	8
Select the User List File	To Import
To reference an example file, press:	Download
Overwrite duplicate accounts	
User List File:	Browse
Previous	ext Cancel

This window displays all the users in the file. If there are any error warnings in the State field. The user will not be able to go to the next window.

Click Next to continue.



The window displays the final results of importing users to the ShareCenter.

l	mport User	S						8
	Import Users	Summary						
	User Name	Password	Group(s)	Share Folde	Share Folde	Share Folde		
	UserName01	12345					300 MB	
			Previous	Apply	Cancel			

Create Batch Users

Click the Create Batch button to see the welcome window.



This window allows you to create multiple users.

User Name Prefix	Enter the prefix of the users	
Start Number	Enter the start number of the users.	
Create Number	Enter the total number of the users.	
Password	Enter the password of the users	
Confirm Password	Retype the password	
Overwrite duplicate Accounts		
Set Quota	Tick the Set Quota check box to limit the storage capacity (in megabyte) for the user. The value of 0 means an unlimited quota size.	

Create Batch	Users	8
User Informatio	n	
User Name Prefix:		1
Start Number:	0	j .
Create Number:	1	
Password:]
Confirm Password:		
Quotas	accounts	
Set Quota Quotas: 0	MB	
	Previous Next Cance	ei

This window is used to add the users to groups. If there is no entry in the list, you can go to **Account Management** > **Groups** to create groups.

- **Search** Enter the search keyword and click sto search for the group. Click to clear the search field and all groups' information appears.
 - Add Tick the corresponding check box to add the users to the groups.
 - PageDisplays number of pages. You can enter a page
number in the field to jump to the specific page.
Click First Page (▲), Previous Page (▲), Next
Page (▲) or Last page (▲) to search for the group.
- Refresh Click 🖾 to update the group list.



This window is used to assign access rights to the users for the corresponding share folder(s) to the share folders. If there is no entry in the list, you can go to **Account Management > Share Folders** to create share folders.

- **Search** Enter the search keyword and click sto search for the folder. Click to clear the search field and all folders appear.
- **Read Only** Tick the check box for read only access right.
- **Read/Write** Tick the check box for both read and write access rights.
 - **Deny** Tick the check box for no access right.
 - PageDisplays number of pages. You can enter a page
number in the field to jump to the specific page.
Click First Page (▲), Previous Page (▲), Next
Page (▲) or Last page (▲) to search for the group.
 - **Refresh** Click **W** to update the folder list.

Click Next to continue.

Create Batch Users Share Folder List X Search Share Name Path Read/Write Read Only Deny 0 Page 1 of 1 No data to display Previous Next Cancel

This window displays a summary of the configured information.

Click **Previous** to modify the settings.

Click **Apply** to save the settings. Depending on the amount of users, the procedure may take a few hours.

User Name	State
UserBatch0	
UserBatch1	
UserBatch2	
Batch User's Opt	tions Settings
Options	Settings
Options Password	Settings
Options Password Group Name	Settings 45678
Options Password Group Name Quotas	Settings 45678

Groups

Click the **Groups** icon in the Account Management window or the Groups link in the left window to create, edit or delete a group.

Create	Click the button to create a new group.	C
Edit	Select a group and click the button to configure the group's information.	
Delete	Select a group and click the button to remove the group from the list.	
Search	Enter the search keyword and click 🔜 to search for the group. Click 🗷 to clear the search field	

and all groups' information appears.

lelete	Search	
Group Member(s)		
	N	o data to display
	Group Member(s)	Group Member(s)

Create a Group

Click the **Create** button to see the welcome window.

Group Name Enter a name of the group



This window is used to add the users to the group. If there is no entry in the list, you can go to **Account Management** > **Users** to create users.

- **Search** Enter the search keyword and click sto search for the user. Click to clear the search field and all users' information appears.
 - Add Tick the corresponding check box to add the user to the group.
 - PageDisplays number of pages. You can enter a page
number in the field to jump to the specific page.
Click First Page (▲), Previous Page (▲), Next
Page (▲) or Last page (▲) to search for the group.
- Refresh Click To update the group list.

Click **Apply** to save the settings.

Create Group User List Search User Name Add Users UserName UserName01 m UserBatch0 UserBatch1 UserBatch2 0 DI Page 1 of 1 D Displaying 1 - 6 of 6 Previous Apply Cancel

Share Folders

Click the **Share Folders** icon in the Account Management window or the Share Folders link in the left window to create, edit or delete a share folder.

- **Create** Click the button to create a new folder.
 - Edit Select a folder and click the button to configure the folder's information.
- **Delete** Select a folder and click the button to remove the folder from the list.
- **Search** Enter the search keyword and click sto search for the folder. Click to clear the search field and all folders' information appears.
- PageDisplays number of pages. You can enter a page
number in the field to jump to the specific page.
Click First Page (▲), Previous Page (▲), Next
Page (▲) or Last page (▲) to search for the group.
- **Refresh** Click **W** to update the group list.

Create Edit [lelete	Search	
Group Name	Group Member(S)		
Page 1 of	O IQ Q	No	data to display

Create a Share Folder

Click the **Create** button to see the welcome window.



This window allows you to create multiple share folders.

- Select Path Click the field to show the available folders. Click the **Create** button to add a new folder. Double-click a folder to select it.
 - **Oplocks** Click **Enable** to enable the Opportunistic lock (oplock) mechanism.
- Map Archive Click Enable to the map archive function.
- **Recycle Bin** Click **Enable** to enable the recycle bin for this share folder.
 - Set Quota Tick the Set Quota check box to limit the storage capacity (in megabyte) for the share folder. The value of 0 means an unlimited quota size.

Create Share Folder			8
Volume Pa	ath		13
Select Path:			
Share Fol	der Option	S	
Oplocks:	O Enable	Oisable	
Map Archive:	O Enable	 Disable 	
Recycle Bin:	🔘 Enable	Oisable	
Quotas			
Set Quota Quotas:		МВ	
	Previ	ous Next Cance	

Section 3 - Configuration

This window assigns the access rights of this folder.

All Users	Tick the radio button to grant all the users the
	same access right to the folder.

Specific User Tick the check box to grant access rights to the specific users.



If **All Users** is selected in the previous window, this window appears.

Read Only	Tick the check box for read only access right
-----------	---

Read/Write Tick the check box for both read and write access rights.

Deny Tick the check box for no access right.



If **Specific User** is selected in the previous window, this window appears.

Local User / Local	Use the drop-down menu to toggle between
Group	Local User and Local Group.

- **Search** Enter the search keyword and click search for the folder. Click to clear the search field and all folders' information appears
- **Read Only** Tick the check box for read only access right.
- **Read/Write** Tick the check box for both read and write access rights.
 - **Deny** Tick the check box for no access right.
 - PageDisplays number of pages. You can enter
a page number in the field to jump to the
specific page. Click First Page (▲), Previous
Page (▲), Next Page (▲) or Last page (▲) to
search for the group.
 - **Refresh** Click Stoupdate the group list.

Click Next to continue.

Create Share Folder



This window displays a summary of the configured information.

Click **Previous** to modify the settings.

Summary		
Options	Settings	
Path	/Volume_50/shareFolder	
Oplocks	Enable	
Map Archive	Disable	
Recycle Bin	Disable	
Quotas	50 MB	
Access Rights	Allow everybody read only	

System Management This folder contains the Network, Time and Date, System Settings, Power Management, Email Alerts, Firmware Upgrade, and Logs. Click the folder to see the subcategories.

ShareCenter Pro [™] by D-L			
English 🕏			Welcome admint Logout Shutdown 오
	System Management		
 Status Disk Management Account Management System Management Time and Date System Settings Power Management Email Alerts Firmware Upgrade Logs Network Services Applications Backup Extension Pack 	System Management	Time and Date	System Settings
Search	Logs		
			D-Link

Network

Click the **Network** icon in the System Management window or the Network link in the left window to configure the Network.

Click the LAN 1 tab to see the following window.

DHCP Client	Click the radio button to obtain the IP address
	from a DHCP server.
0 15	Oligiate a nodia buttor to accience atatic ID address

- **Static IP** Click the radio button to assign a static IP address to the ShareCenter.
- **IP Address** Enter a static IP address.
- Subnet Mask Enter the subnet mask for the IP address.
- Jumbo Frame Use the drop-down menu to select the larger frame size than standard Ethernet frame size.
 - Gateway Enter the gateway IP address for the ShareCenter.
 - VLAN Enable or disable the VLAN.
 - VLAN ID Enter a VLAN ID when VLAN is enabled.
- **Port Bonding** Enable or disable port bonding which is also known as port trunking.
 - **Option** Use the drop-down menu to select the port bonding method. Available methods are Round Robin, Active Backup, XOR, Broadcast, 802.3ad, Adaptvie Transmit Load Balancing, and Adaptive Load Balancing.

Click **Apply** to save the settings.

LAN 1

O DHCP Client			
 Static IP IP Address: 	192.168.0.32		
Subnet Mask:	255.255.255.0	_	
Jumbo Frame:	Disabled		
Gateway:	192.168.0.1		
VLAN			
VLAN:	O Enable 💿 Disa	ble	
VLAN ID:			
Port Bonding	9		
Port Bonding:	O Enable 💿 Disa	ble	
Option:			

LAN 2

Click the LAN 2 tab to see the following window.

DHCP Client	Click the radio button to obtain the IP address from a DHCP server.
Static IP	Click the radio button to assign a static IP address to the ShareCenter.
IP Address	Enter a static IP address.
Subnet Mask	Enter the subnet mask for the IP address.
Jumbo Frame	Use the drop-down menu to select the larger frame size than standard Ethernet frame size.
Gateway	Enter the gateway IP address for the ShareCenter.
VLAN	Enable or disable the VLAN.
VLAN ID	Enter a VLAN ID when VLAN is enabled.

LAN 2		
DHCP Client		
O Static IP		
IP Address:		
Subnet Mask:		
Jumbo Frame:	Disabled	
Gateway:		
VLAN		
VLAN:	O Enable O Disable	
VLAN ID:		

Global Settings

Click the Global Settings tab to see the following window.

Primary DNS Enter the main DNS address for the ShareCenter.

SecondaryEnter the secondary DNS address for theDNSShareCenter.

Gateway Use the drop-down menu to select the LAN interface.

AN 1 LAN 2	Global Settings Route
Host Name	
Host Name:	dlnk-570412
DNS Server	
Primary DNS:	192.168.69.1
Secondary DNS:	
Default Gate	way
Gateway:	LAN 1
	Apply Cancel

Route

Click the **Route** tab to see the following window.

- **Create** Click to create a new routing path.
 - Edit Select a routing path and click the button to edit the routing path.
- **Delete** Select a routing path and click the button to remove the entry from the list.
- PageDisplays number of pages. You can enter a page
number in the field to jump to the specific page.
Click First Page (▲), Previous Page (▲), Next
Page (▲) or Last page (▲) to search for the group.
- Refresh Click To update the group list.

P Address	Subnet Mask	Gateway	Metric	Interface
92.168.0.0	255.255.255.0	0.0.0.0	0	LAN 1
224.0.0.0	255.0.0.0	0.0.0.0	0	LAN 1
default	0.0.0	192.168.0.1	0	LAN 1

Click the **Create** button under the Route tab to see the window.

Network	Enter an IP address of the routing path.
Address	

- Subnet Mask Enter the subnet mask for the IP address.
 - Metric Enter an integer cost metric for the route.
 - Interface Use the drop-down menu to select the interface.
 - Gateway Enter the forwarding or next hop IP address.



Time and Date

Click the **Time and Date** icon in the System Management window or the Time and Date link in the left window to configure the time and date of the ShareCenter.

Current Time	Displays the current time of the ShareCenter.
Time Zone	Use the drop-down menu to select the time zone of your area.
Set from Computer	Click the radio button to synchronize the ShareCenter's time with your computer.
Set Manually	Click the radio button to set the time and date manually.
Set from NTP Server	Click the radio button and select a NTP server to synchronize the ShareCenter's time with the NTP server.

Current Time:	04:03:27 , 01/15/2010
Time Zone S	Settings
Time Zone:	(GMT) Greenwich Mean Time : Dublin, Edinburgh, Lisbon, London
Synchronize	Time Settings
Set from Comp	suter
O Set Manually	
O Set from NTP	Conjor
O Section ATP	Select NTP.Server

System Settings

Click the **System Settings** icon in the System Management window or the System Settings link in the left window to configure the system settings.

Save Configuration Load Configuration	Click the Save button to save the current settings to the selected location. Click the Browse button to locate the path for the configuration file and click Load to load the file.
Default Configuration	Click Restore to reset the ShareCenter back to the factory default settings.
Web Timeout	Enter a period of time. If the web is idle longer than the time, it will be automatically logged out.
System Overheat Temperature	Toggle between Celsius and Fahrenheit and enter a temperature. Once the system temperature is over the entered temperature;, the ShareCenter will automatically shut down.

Save Configuration:			Save	
Load Configuration:	1)[Browse	
Default Configuration:			Restore	
Idle Time Settings				
Web Timeout:	10	(Minutes)		
System Overheat Sett	tings			
System Overheat Temperature:	Celsius	60	°C	

Power Management

Click the **Power Management** icon in the System Management window or the Power Management link in the left window to configure the system power settings.

Power Saving Settings

Click the **Power Saving Settings** tab to see the following window.

Hard Drive Hiberation	Click Enable to enable the function.
Turn Off Hard Drive	Use the drop-down menu to select an idle time, after which the hard drives will enter into hibernation mode.
OLED Display	Use the drop-down menu to select an idle time, after which the OLED will be turned off.
Auto Power Recovery	Click Enable to have the power restored when encountering a power failure.
Туре	Use the drop-down menu to select the fan speed modes. Available choices are Auto (Off/Low/ High), Auto (Low/High) and Manual (Always on High).

Power Saving Setti	Ings Schedule Power On/Off Settings
Hard Drive Hib	peration Settings
Hard Drive Hiberation:	O Enable O Disable
Turn Off Hard Drive:	After 5 Mins
OLED Display	Settings
OLED Display:	Sleep After 10 Secs
Auto Power R	ecovery Settings
Auto Power Recovery:	⊙ Enable ○ Disable
Fan Control	
Туре:	Auto (Off/Low/High)
	Apply Cancel

Schedule Power On/Off Settings

Click the **Schedule Power On/Off Settings** tab to see the following window. This function will be deactivated if the schedule is configured at the same time as the firmware update.

Schedule	Click Enable to set a schedule for automatic
Power On/Off	system power on and off.

Schedule On &Use the drop-down menus to select the time ofSchedule Offsystem power on and off.

Power Saving	Settings Schedule Powe	er On/Off Settings		
Schedule F	Power On/Off			
Schedule Power I	On/Off: 🔿 Enable 💿 Disat	le		
Schedule (On & Schedule Off			
Schedule C				
SUN:	Schedule On	Schedule Off		
MON:	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
TUE:	0 - 00 -			
WED:	0 - 00 -			
THU:	0 - 00 -			
FRI	00 🔽 00 🔽	0 🔽 00 🔽		
SAT:	0 🔹 00 💌			
		Apply	Canaal	
		Apply	Cancel	

Email Alerts

Click the **Email Alerts** icon in the System Management window or the Email Alerts link in the left window to configure the e-mail alert settings.

Email Alert	Click the radio buttons to enable or disable the e-mail alert function.
Login Method	Use the drop-down menu to select the login method. If the SMTP server requires authentication, select Login . If not, select Anonymous .
User Name	If Login is selected in Login Method , enter the user name of the e-mail account.
Password	If Login is selected in Login Method , enter the password of the e-mail account.
Encryption	Select SSL/TLS if the SMTP server requires authentication.
SMTP Server	Enter the IP address of the SMTP server.
Port Number	Enter the port number of the SMTP server.
Sender E-mail	Enter the sender's e-mail address.
Receiver E-mail	Enter the e-mail address that the e-mail alert sends to.
Test E-mail	Click the Test E-Mail button to send a test e-mail.
Event Alert Settings	Tick the check boxes to select the situation that will cause the e-mail alert to be sent out.

Email Alert:	O Enable 💿 Disable		
Login Method:			
User Name:			
Password:			
Encryption:	O SSL/TLS O Disable		
SMTP Server:			
Port Number:			
Sender E-mail:			
Receiver E-mail:			
Test E-Mail:	Test E-Mail		
Test E-Mail: Event Alert Administrator	Settings s Password Has Been Changed		
Test E-Mail: Event Alert Administrator ¹ Firmware Has	Settings s Password Has Been Changed		
Test E-Mail: Event Alert Administrator Firmware Has Network Sett	Settings s Password Has Been Changed Been Upgraded		
Test E-Mail: Event Alert Administrator Firmware Has Network Sett System Temp	Settings s Password Has Been Changed Been Upgraded Ings Have Been Changed		
Test E-Mail: Event Alert Administrator' Firmware Has Network Sett System Temp S.M.A.R.T Te	Settings s Password Has Been Changed Been Upgraded ngs Have Been Changed erature Has Been Exceeded		
Test E-Mai: Event Alert Administrator' Firmware Has Network Sett System Temp S.M.A.R.T Te System Has R	Settings s Password Has Been Changed Been Upgraded ngs Have Been Changed erature Has Been Exceeded at Has Finished		
Test E-Mai: Event Alert Administrator' Firmware Has Network Sett System Temp S.M.A.R.T Te System Has R	Settings s Password Has Been Changed Been Upgraded ings Have Been Changed erature Has Been Exceeded st Has Finkhed beboted From A Power Failure ttatus Has Been Changed interval: 00	(Minutes)	

Firmware Upgrade

Click the **Firmware Upgrade** icon in the System Management window or the Firmware Upgrade link in the left window to update the firmware.

Current Firmware	Displays the current firmware in the system.
Version	

Firmware Date Displays the date of the firmware.

File Path Click the Browse button to locate the firmware. You must save the firmware to the local hard drive of your computer before upgrading the firmware.

Click **Apply** to start updating the firmware.

Current Firmware Version:	1.00b10		
Firmware Date:	2010.08.25.2128		
File Path:		Browse	

Log Settings

Click the **Log Settings** icon in the System Management window or the Log Settings link in the left window to configure the log settings.

Log Settings

Click the Log Settings tab to see the following window.

Log Settings Click the radio buttons to enable various situations which will be recorded in the logs.

Log Setting	S				
System Log:	Enable	O Disable			
NFS:	Enable	O Disable			
CIFS:	Enable	O Disable			
FTP:	Enable	O Disable			
Event:	Enable	O Disable			

Log Message List

Click the Log Message List tab to see the following window.

Refresh Log	Click the button to	update the	log message list.
-------------	---------------------	------------	-------------------

Clear Log Click the button to delete all the logs.

- **Save Log** Click the button to save the logs to the local computer.
- Severity The numbers below represent different levels of severity.
 - 0: Emergency
 - 1: Critical
 - 2: Alert
 - 3: Error
 - 4: Warning
 - 5: Notice
 - 6: Info
 - 7: Debug
- **Date Time** Displays the time and date for the log.
- Log Message Displays detail information about the log.
 - Page Displays number of pages. You can enter a page number in the field to jump to the specific page. Click First Page (▲), Previous Page (▲), Next Page (▲) or Last page (▲) to search for the group.
 - **Refresh** Click **S** to update the group list.

Ref	resh Log	Clear Log Save Lo	pg	
1	Severity	Date Time	Log message	
1	6	2010 Jan 15 00:53:01	Firmware : version 1.00b10 updated	
2	5	2010 Jan 15 00:52:57	Start service : DFS	
3	5	2010 Jan 15 00:52:57	Start service : NFS	
4	5	2010 Jan 15 00:52:57	Start service : FTP	
5	5	2010 Jan 15 00:52:35	Start service : CIFS	
6	6	2010 Jan 15 00:52:26	Power On	
7	5	2010 Jan 15 00:50:12	Stop service : CIFS	
8	5	2010 Jan 14 22:42:55	Start service : DFS	
9	5	2010 Jan 14 22:42:55	Start service : NFS	
0	5	2010 Jan 14 22:42:55	Start service : FTP	

Network Services

This folder contains File Sharing, Dynamic DNS, SNMP and Network Discovery Services. Click the folder to see the subcategories.



File Sharing

Click the **File Sharing** icon in the Network Services window or the File Sharing link in the left window to configure the network services.

File Sharing

Click the File Sharing tab to see the following window.

File Sharing Click the radio buttons to enable various network services.

	FTP NFS CIFS DFS	
File Sha	<u>] //</u>	
CIFS:	Enable Disable	
FTP:	O Enable O Disable	
NFS:	Enable Disable	
DFS:	💿 Enable 🔿 Disable	
Quota:	💿 Enable 🔿 Disable	
	Apply Cancel	
	Appy Caller	

FTP

Click the **FTP** tab to see the following window.

Control Port	The default port for FTP is 21. Enter a port number in the range of 1025 to 3688, 3690 to 49999, and 65501 to 65535.
Port Range of Passive FTP	The default port range for passive FTP is from 55536 to 55663. Click the Use the following port range radio button and manually enter the port range from 1025 to 65535.
Respond with external IP address for Passive mode	Click Enable to respond with external IP address for the passive FTP connection request.
Client Language	Use the drop-down menu to select the supported language for the FTP clients.
Max Connections	Use the drop-down menu to select the maximum number of concurrent FTP connection.
Max Connections per IP	Use the drop-down menu to select the maximum number of concurrent FTP per IP connection.
Connection Idle Time	Use the drop-down menu to select the time that the FTP server logs out the user after this period of idle time.
Bandwidth Restriction	Click Enable to restrict the bandwidth of each FTP connection. Enter the number in KB/s for the maximum speed of upload and download.
Anonymous Support	Click Enable to allow anonymous FTP to log in.
SSL/TLS Connection Only	Click Enable to only allow SSL or TLS connection requests from the FTP clients.

File Sharing (FTP) NFS CIFS DFS **Connection Settings** Control Port: 21 Port range of Passive FTP: • Use the default port range (55536~55663) ~ 55663 O Use the following port range: 55536 Respond with external IP address for Passive mode: O Enable O Disable External IP address: Client Language: Unicode Connection Restrictions Max Connections: 64 Max Connections per IP: 02 Connection Idle Time: 05 Minutes Bandwidth restriction: O Enable O Disable Max upload rate per connection: KB/s (0 KB/s means unlimited.) Max download rate per connection: KB/s (0 KB/s means unlimited.) Security Settings Anonymous Support:

 Enable
 Disable SSL/TLS Connection Only: O Enable O Disable

Apply Cancel

Click **Apply** to save the settings.

D-Link ShareCenter Pro 1200 User Manual

NFS

Click the **NFS** tab to see the following window.

- Create Click to add a new NFS client.
 - Edit Select a mount path and click the button to edit the NFS client.
- **Delete** Select amount path and click the button to remove the entry from the list.
- **Search** Enter the search keyword and click search for the specific entry. Click to clear the search field and see all the entries.
 - PageDisplays number of pages. You can enter a page
number in the field to jump to the specific page.
Click First Page (▲), Previous Page (▲), Next
Page (▲) or Last page (▲) to search for the group.
- **Refresh** Click To update the group list.

File Sharing FTP NFS CIFS DFS				
Create Edit Delete			Search	
	Here was			Colume Locked
Mount Path	Host	Permission	Root Squash	Status
				No data to display

Click the **Create** button to see this window to select a share folder.

- **Search** Enter the search keyword and click search for the specific entry. Click to clear the search field and see all the entries.
 - PageDisplays number of pages. You can enter a page
number in the field to jump to the specific page.
Click First Page (▲), Previous Page (▲), Next
Page (▲) or Last page (▲) to search for the group.
- **Refresh** Click **W** to update the group list.

hare Folder Li	st	
	Search	N
Share Name	Path	Status
Share Name ShareFolder	Path /Volume_50/ShareFolder	
Section 3 - Configuration

This window is use to configure the permission of the NFS.

Permission	Use the drop-down menu to assign NFS access
	rights, Read or Read/Write.

Root SquashSelect Root Squash and the system maps
requests from uid/gid 0 to the anonymous uid/gid.HostEnter the host name.

Create NFS Share					
Permission					
Permission:	Read Only	-			
Root Squash:	Root Squash	×			
Host:					
6	Previous Apply Can	cel			

CIFS

Click the **CIFS** tab to see the following window.

Description Workgroup	Enter the description of your device. Click the radio button to choose the system to be in a workgroup. Enter the name of the workgroup in the field.
Active Directory	Click the radio button to choose the system to be in an Active Directory (AD).
User Name Password	Enter the AD server account name. Enter the AD server account password.
DNS Workgroup	Enter a DNS IP address to analyze the domain name of the AD server. Etner the name of the workgroup which should
Realm Name AD Server Name	be the same as the computers on the network. Enter the AD server domain name. Enter the AD server hostname.

File Sharing FTP	NFS CIFS DFS
Description	
Description:	ShareCenter Pro 1200
Workgroup Ty	уре
Workgroup	
Workgroup:	WORKGROUP
O Active Directory	
User Name:	
Password:	
DNS:	
Workgroup:	
Realm Name:	
AD Server Name:	
	Apply Cancel

DFS

Click the **DFS** tab to see the following window.

- Create Click to add a new DFS share.
 - Edit Select a local share name and click the button to edit the DFS share.
- **Delete** Select a local share name and click the button to remove the entry from the list.
- **Search** Enter the search keyword and click search for the DFS share. Click to clear the search field and see all the entries.
 - PageDisplays number of pages. You can enter a page
number in the field to jump to the specific page.
Click First Page (▲), Previous Page (▲), Next
Page (▲) or Last page (▲) to search for the group.
- **Refresh** Click To update the group list.

File Sharing FTP NFS CIFS DFS				
Create Edit Delete			Search	
			-	Colume Locked
Mount Path	Host	Permission	Root Squash	Status
				No data to display

Click the **Create** button to see this window to add a new DFS share.

Host	Enter an IP address, a host name or a URL in the field.
Remote share folder	Enter a remote share folder location manually, or click the Get Host Share Folder button to search for one.
Local share name	Enter the local share name in the field.

Create DFS	Share	8
Host: Remote share folder:		Get Host Share Folder
Local share name:	Apply Cancel	

Dynamic DNS

Click the **Dynamic DNS** icon in the Network Services window or the Dynamic DNS link in the left window to configure the dynamic DNS.

Dynamic DNS	Click the radio button to enable or disable the dynamic DNS function.
Server Address	Use the drop-down menu to select a dynamic DNS service provider.
Host Name	Enter the host name.
Username or Key	Enter the username or key provided by the dynamic DNS service provider.
Password or Key	Enter the password or key provided by the dynamic DNS service provider.
Verify Password or Key	Re-type the password or key.
Timeout	Enter a time in hours for periodic updates from the dynamic DNS provider.
Status	Displays the current status to the server.

Dynamic DNS:	🔘 Enable 💿 Disabl	e
Server Address:		<< Select Dynamic DNS Server
Host Name:		(e.g.:me.mydomain.net)
Username or Key:		
Password or Key:		
Verify Password or Key:		
Timeout:		(Hours)
Status:	Disconnected	

SNMP

Click the **SNMP** icon in the Network Services window or the SNMP link in the left window to configure the SNMP settings. Simple Network Management Protocol (SNMP) is used to monitor the conditions of the network-attached devices.

- SNMPEnable or Disable SNMP.SNMP CommunityEnter the name of the SNMP community.NotificationEnable or Disable trap support.
 - **Notification IP** Enter the IP address that will receive the notification.

SNMP:	O Enable	 Disable 			
SNMP Community:					
Notification:	O Enable	Disable			
Notification IP:					

Network Discovery Services

Click the **Network Discovery Services** icon in the Network Services window or the Network Discovery Services link in the left window to configure the settings.

- **UPnP Discovery** Click **Enable** to allow the ShareCenter to be discovered on a network via the UPnP discovery protocol.
 - **LLTD** Click **Enable** to allow the ShareCenter to be discovered by the network map under Windows Vista or Windows 7.

UPnP Discovery:	O Enable	 Disable 			
	O Enable				

Applications This folder contains the Web File Manager and Download Manager. Click the folder to see the subcategories.



Web File Manager

Click the **Web File Manager** icon in the Applications window or the Web File Manager link in the left window to configure the settings. This window is used to start a web server for users to upload and download files through the web browser.

Server	Click the radio buttons to enable or disable
	the server.

- **HTTP Port** Enter the port number for the function. Port 80 cannot be used as it is used for administration purposes.
- **SSL Connection** Click the radio buttons to enable or disable the HTTPS connection.
 - **SSL Port** Enter the port number for the HTTPS connection.

Server:	O Enable	O Disable		
HTTP Port:				
SSL Connection:	O Enable	Disable		
SSL Port:				

Download Manager

Click the **Download Manager** icon in the Applications window or the Download Manager link in the left window to configure the settings. This window is used to schedule downloading files from FTP or HTTP sites.

Create	Click to add a new download job.	Create Edit Delete		
Edit	Select an entry and click the button to edit.	Status % Speed Download Path	Save To	Time
Delete	Select an entry and click the button to remove the entry from the list.			
Page	Displays number of pages. You can enter a page number in the field to jump to the specific page. Click First Page (▲), Previous Page (▲), Next Page (▲) or Last page (▲) to search for the group.			
Refresh	Click 🕼 to update the group list.	Page 1 of 1 D D O		No data to display

Create a Downloading Job

Click the **Create** button to see the window.

Download Type	Toggle between the FTP or HTTP download methods.
Login method	Click the Account radio button when a password is required for downloading files. Click the Anonymous where there is no password required for downloading files.
User Name	Enter a user name for downloading.
Password	Enter a password for downloading.
Туре	Toggle between File or Folder to download the specific file or all files in a specific folder.

- **URL** Enter the FTP, HTTP or local site address for the scheduled download. Click the **Test** button to see if the URL can be connected.
- Save To Click the field to show the available folders. Click the **Create** button to add a new folder. Doubleclick a folder to select it.

Click Next to continue.

Download Se	ettings	
Download Type:	FTP	
Login Method:	O Account Anonymous	
User Name:	0.0.0.00	
Password:	*****	
Туре:	Folder	
URL:	ftp://	Test
Save To:		

This window is used to set the schedule for downloading.

Recurring	Use the drop-down menu to have repeated
Download	scheduled download time every day, week or
	month. Select None to disable the recurring download.

- When Click to select year and date for downloading.
- **Time** Use the drop-down menu to select downloading time.
- Weekly Select a day of the week for recurring download.
- Monthly Select the month for recurring download.

Create Dow	8	
Download Sch	iedule	
Recurring Download:	None 🔽 00 🔽 : 00 💌	
When:	2010-08-30	
Time:	00 🔽 : 00 🔽	
Weekly:	MON	
Monthly:	01 🔽	
	Previous Apply Cancel	

Backup

This folder contains the Volume Snapshot, Local Backup, Remote Backup, and External Backup. Click the folder to see the subcategories.



Volume Snapshot

Click the **Volume Snapshot** icon in the Backup window or the Volume Snapshot link in the left window to configure the settings. This window is used to create, edit or delete a snapshot job. It also allows you to take a snapshot of a volume. The ShareCenter supports up to 10 snapshot jobs and each job can have maximum 20 snapshots.

Create	Click to add a new snapshot job.	Create	Edit Delete	Take snapshot	Show sna	pshot	
Edit	Select an entry and click the button to edit.	Volume	Name	Schedule	Count	State	Path
Delete	Select an entry and click the button to remove the entry from the list.						
Take snapshot	Click the button to take a snapshot of a volume.						
Show snapshot	Click the button to show the calendar indicating on which dates a snapshot had been taken.						

Create a Snapshot Job

Click the **Create** button to see the window.

Folder	Click the field to show the available folders. Click
	a folder to see the sub-folders. Double-click a
	folder to select it.

- **Count** Use the drop-down menu to select the number of snapshots for this job.
- Schedule Use the drop-down menu to select manually schedule the job, or schedule to take the snapshot on a daily, weekly or monthly basis.
 - **Time** Use the drop-down menus to select hour and minute of the day.
- Weekday Use the drop-down menu to select the day of the week.
 - Date Use the drop-down menu to select the day of the month.

older:			
Count:	10		
Schedule:	Manually	~	
Fime:	00	00	V
Veekday:	SUN		
Date:	01		

Show Snapshot

Click the **Show Snapshot** button to see the calendar.

Calendar Find the year and month of the snapshot on that day. The date cell is highlighted when there are snapshots on that day. Click the cell to view details of the volume's snapshot(s).

Click **Close** to go back to the Volume Snapshot window.

		hanmally nuary	- >		2010		
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
					1	2	
3	4	5	6	7	8	9	
10	11	12	13	14	15	16	
17	18	19	20	21	22	23	
24	25	26	27	28	29	30	
31							

The window displays the volume's snapshot(s) information.

- **Delete** Select an entry and click the button to remove the entry from the list.
- PageDisplays number of pages. You can enter a page
number in the field to jump to the specific page.
Click First Page (▲), Previous Page (▲), Next
Page (▲) or Last page (▲) to search for the group.
- Refresh Click To update the group list.

Click **Close** to go back to the previous window.

Name	Snapshot	Date Time	Path
Volume_50	snapshot.0	2010.01.18-0	Volume_50_snapshot/Volume_50/2

Local Backup

Click the **Local Backup** icon in the Backup window or the Local Backup link in the left window to configure the settings. This window allows files and folders to be backed up to local folders.

Create	Click to add a new backup job.	Create Edit Delete		
Edit	Select an entry and click the button to edit.	Status % Speed Download Path	Save To	Time
Delete	Select an entry and click the button to remove the entry from the list.			
Page	Displays number of pages. You can enter a page number in the field to jump to the specific page. Click First Page (▲), Previous Page (▲), Next Page (▲) or Last page (▲) to search for the group.	121 A and the N N P		
Refresh	Click 🗳 to update the group list.	_ RG		No c

data to dispi

Create a Local Backup Job

Click the **Create** button to see the window.

- Login Method Click the Account radio button when a password is required for the procedure. Click the Anonymous where there is no password required for the procedure.
 - User Name Enter a user name for backup.
 - **Password** Enter a password for backup.
 - **Type** Toggle between File or Folder to download the specific file or all files in a specific folder.
 - Path Enter the path manually, or click Local to locate the path. Click the Test button to see if the path can be connected to.
 - Save To Click the field to show the available folders. Click the **Create** button to add a new folder. Doubleclick a folder to select it.
- Incremental Tick the check box to enable the incremental backup method. All backups after the first full backup will be on an incremental basis. Only the changes since the last backup will be backed up.

Click Next to continue.

Local Backu	ip Settings
Login Method:	O Account Anonymous
User Name:	and a second
Password:	
Туре:	Folder
Path:	Test Local
Save To:	
	Incremental Backup (Only for Local Backup)

This window is used to set the schedule for local backup jobs.

Recurring
BackupUse the drop-down menu to enable a recurring
backup. This can be done on a daily, weekly
or monthly basis. Select None to disable the
recurring backup.WhenOticity

hen Click I to select year and date for backup.

Time Use the drop-down menu to select the time for backup.

Weekly Select a day of the week for recurring backup.

Monthly Select the month for recurring backup.

Click **Apply** to save the settings.

Recurring Backup:	None 🔽 00 🔽 : 00 🔽	
When:	2010-08-30	
Time:	00 🔽 : 00 🔽	
Weekly:	MON	
Monthly:	01 -	
	Previous Apply Cancel	

D-Link ShareCenter Pro 1200 User Manual

Remote Backup

Click the **Remote Backup** icon in the Backup window or the Remote Backup link in the left window to configure the remote backup.

Remote Backup Server

Click the Remote Backup Server tab to see the following window.

- Enable Remote Tick the check box to enable the function. Backup
 - **Password** Enter the password for backing up files and folders from or to the ShareCenter. This is the remote backup password. The password for the remote NAS should be the same as the password of the ShareCenter.

Remote Backup Server) R	emote Backup Job	_		
Remote Backup Serve	r			
Enable Remote Backup				
Password:				
			2	
		Apply Cancel		

Remote Backup Job

Click the **Remote Backup Job** tab to see the following window.

		Re
Create	Click to add a new remote backup job.	
Edit	Select an entry and click the button to edit.	6
Delete	Select an entry and click the button to remove the entry from the list.	
Backup	Click the button to back up.	
Enable/Disable Schedule	Click the button to enable or disable the schedule remote backup function.	
Page	Displays number of pages. You can enter a page number in the field to jump to the specific page. Click First Page (M), Previous Page (M), Next Page (M) or Last page (M) to search for the group.	
Refresh	Click 🛐 to undate the group list	

Refresh Click **W** to update the group list.

Create Edi	t Delete Back	p Enable / Disable Schedule
Job Name	Schedule	Status
Page	of 1 🕞 🕞 🚱	
1.4 4 1.434		

Click **Create** to see the window.

Server Type Use the drop-down menu to select between D-Link NAS Server or Rsync Server.

Click Next to continue.



Section 3 - Configuration

This window allows you to configure the source settings.

- Job Name Enter the name of the remote backup job.
- **Folder Path** Click the field to select the source file/folder to be backed up remotely.

Click Next to continue.



This window is used to configure the destination settings.

IP of Remote Server	Enter the IP address of the server.
Password	Enter the password of the destination server.
Encryption Support	Tick the check box to enable SSH encryption.
Keep Existing File	Tick the check box to keep the existing file the same (not overwrite) at the remote server and create another backup copy.

Click **Next** to continue.

Create Remote Backup Job

Destination Settings (D-Link NAS Server)

IP of Remote Server: Password:				
Encryption Suppo	rt			
Keep Existing File				
_	rovioue	Next	Canca	
	Previous	Next	Cance	

x

This window is used to configure the destination path.

Destination Path Click the field to select the destination path.

Click Next to continue.



This window is used to schedule the remote backup job.

- Recurring
BackupUse the drop-down menu to enable a recurring
remote backup. This can be done on a daily,
weekly or monthly basis. Select Backup now
to start the backup.
 - When Click I to select year and date for backup.
 - **Time** Use the drop-down menu to select the time for backup.
 - **Weekly** Select a day of the week for recurring backup.
 - Monthly Select the month for recurring backup.

Recurring Backup:	Backup now	V
When:	2010-09-17	
Time:	00 🔽 : 00	
Weekly:	MON	
Monthly:	01	

External Backup

Click the **External Backup** icon in the Backup window or the External Backup link in the left window to configure the settings. This window is used to back up data to external devices.

- **Source** Click the USB port that is connected to an external USB storage device.
- Select Path Click the field to show the available folders. Click the **Create** button to add a new folder. Double-click a folder to select it.
 - Mode Tick the Incremental Backup check box to enable the incremental backup method. All backups after first full backup will be on an incremental basis. Only the changes since the last backup will be backed up.

USB Backu	q	
Source: Select Path:	○ Right Port ⊙ Left Port	
Mode:	Incremental Backup	
	Apply Cancel	

Extension Pack

This folder contains the Extension Pack. Click the folder to see the subcategories.



Extension Pack

Click the **Extension Pack** icon in the Extension Pack window or the Extension Pack link in the left window to configure the add-ons.

File Path	Click the Browse button to locate the file. Click
	Apply to add the file to the Add-ons list.

Add-ons List Displays a list of all add-ons modules.

- **Status** Displays if the module is currently activated (Enabled) or deactivated (Disabled).
- **Start/Stop** Activate/Deactivate the module.
 - **Delete** Remove the add-on module from the list.
 - RefreshDisplays number of pages. You can enter a page
number in the field to jump to the specific page.
Click First Page (▲), Previous Page (▲), Next
Page (▲) or Last page (▲) to search for the group.
 - Page Click 🖏 to update the group list.

Add-Ons Setting	gs						
File Path:	B	Browse Apply					
Add-Ons List							
			 				Start Stop
Number Module	e Name		Version	St	atus S	start/Stop	Delete
10 Q Page 1	of1 D D1 🖏						No data to display

Knowledge Base What is RAID?

RAID, short for Redundant Array of Independent Disks, is a combination of two or more disks with the aim of providing fault tolerance and improving performance. There are several different levels of RAID, with each one providing a different method of sharing or distributing data among the drives. The ShareCenter supports **JBOD**, **RAID 0**, **RAID 1**, **RAID 5**, **RAID 6** and **Standalone**.

RAID 0 RAID 0 provides data striping, which spreads out blocks of data over all drives, but does not provide data redundancy.

Although performance is improved, the lack of fault tolerance means that if one drive fails, all data in the array will be lost.



RAID 1 Provides mirroring over multiple disks, with the same read/write speed of a single disk. A RAID 1 array can only be as large as it's smallest member disk.

Because the data is stored on multiple disks, RAID 1 provides fault tolerance and protection, in addition to performance advantages.



RAID 5 RAID 5 provides data striping with distributed parity, which stores information that can be used to reconstruct data. A RAID 5 array will be the size of all the combined disks capacity less the capacity of one disk, e.g. If there are 4x 80GB disks in the array, the arrays capacity will be 240GB (3x80GB).

Implementing RAID 5 on the ShareCenter allows it to continue operating even if one of the disks fails.

The diagram below indicates the operation of RAID 5:



RAID 6 RAID 6 is an extension of RAID 5. It adds an additional parity block by using block-level striping with two parity blocks distributed across all the member disks.

RAID 6 allows the array to continue operating even if two of the disks fail. The diagram below indicates the operation of RAID 6:



Mapping a Drive

You can use the D-Link Easy Search Utility to map drives to your computer. Insert the ShareCenter CD into your CD-ROM drive.



The Easy Search Utility will load and detect any ShareCenter devices that are on the local network.

If the ShareCenter you are working with does not show up in the device list, click Refresh.



Once connected, your mapped drive(s) will appear in My Computer.




USB Print Server

The ShareCenter features a built-in USB print server, giving users the ability to share a printer on their local network. Connect a USB printer to the USB port on the back of the ShareCenter. It is important to ensure that any of the printer manufacturer's drivers are already installed on any computer you want to print from.

To add a printer:





The Windows® Add Printer Wizard will launch:





Add Printer Wizard

	Add Printer Wizard
	Browse for Printer When the list of printers appears, select the one you want to use.
Select Double-click DNS-1200 from the Shared Printers list to expand the tree.	Printer: Shared printers: Microsoft Windows Network WORKGROUP DNS-1200
	Printer information Comment: Status: Documents waiting:
	< Back Next > Canc
	Add Printer Wizard Browse for Printer When the list of printers appears, select the one you want to use.
	Printer: \\dns-346\lp Shared printers: ♣ Microsoft Windows Network ♣ WorkGRDUP ■ DNS-1200 ▲ Ip USB Printer
	Printer information Comment: USB Printer Status: Ready Documents waiting: 0

Select the available USB printer, and click **Next** to continue.

< <u>B</u>ack

<u>N</u>ext >

Cancel

The following printer driver messages will appear:







Add Printer Wizard	
	Completing the Add Printer Wizard
	You have successfully completed the Add Printer Wizard. You specified the following printer settings:
	Name: lp on dns-346 Default: Yes
	Location:
	Comment:
	To close this wizard, click Finish.
	< Back Finish Cancel
<u>.</u>	
	Add Printer Wizard



iSCSI Drive Mapping

The iSCSI Drive Mapping is used to manage the iSCSI settings on the ShareCenter.

Carry out the following to configure the iSCSI settings:



Note: If you cannot see the latest list, click the **Refresh** button to update the status.

Note: You will need to create iSCSI volume in the Disk Management -> iSCSI Target. Click the iSCSI Targets tab to see the iSCSI target name in this section.

The different parameters in the iSCSI Drive Mapping section are described below:

- Name Displays the names of the available iSCSI targets on the ShareCenter.
- Active Displays Yes if the target is active. Displays No if the target is not active.

Connect/Disconnect Choose a target from the list and click the **Connect/Disconnect** button to activate/deactivate the Target. If CHAP authentication has been enabled, then a username and password will be required.

Management Click the button to see the Management window. The window allows you to add, delete, mount and unmount the partition.



Configuring Targets

1. When attempting to connect a target for the first time, choose the target from the list





You will see the Format window.

The different parameters in the Format window are described below:

- **Target** Displays the iSCSI target name you chose.
- Partition Size Tick the Use Maximum Available Space checkbox to specify that the maximum available space on the disk will be used to create the new partition. To specify a size un-tick the checkbox and type in the capacity size of the partition (in megabytes) in the Megabytes field.
- **Format Type** Choose whether to format the new partition with *NTFS* or *FAT32* by ticking the appropriate checkbox.
- **Drive Letter** Choose the drive letter that you want to allocate to the iSCSI partition from the drop-down menu.

When you have finished configuring the Target Settings, click the **Format** button to see the window below



Configuring Disks

This window appears after clicking the **Format** button. Or, select a target in the iSCSI Drive Mapping list and click the **Management** button to see the window.

The Management window allows you to manage partition on the disks installed in the ShareCenter and Mount / Unmount the disks installed in the ShareCenter.

The Disk Management section displays the following parameters:

- **Disk** Displays the ID number of the disk installed in the ShareCenter.
- **Partition** Displays the partition number of the disks partition.
- **Volume** Displays the drive letter that the partition is mapped to on the client machine.
- File System Displays the File System that the partition was formatted with.
 - **Capacity** Displays the total capacity of the partition.
 - **Target** Displays the iSCSI target name of the partition.

Disk	Partition	Volume	File System	Capacity	
1	1	Y:1	NTES	4.00 Gb	dlink-570412:iscsi
<		1.000		<u>)</u>]	>
(Y:1)					

Adding a new partition

Right-click an unallocated partition and click **Add**.

4.00GB Unanocated

The Partition Manager window opens:

To add a partition, configure the parameters as explained below:

- Partition Size Tick the Use Maximum Available Space check box to specify that the maximum available space on the disk will be used to create the new partition. To specify a size, un-tick the check box and type in the capacity of size of the partition (in megabytes) in the Megabytes field.
- **Format Type** Choose whether to format the new partition with *NTFS* or *FAT32* by ticking the appropriate checkbox.
- **Drive Letter** Choose the drive letter that you want to allocate to the iSCSI partition from the drop-down menu.

When you have finished configuring the partition settings, click the **Format** button to add the new partition.



Add

Deleting an existing partition

Managem	ent				
Disk Mar	nagement ——				
Disk	Partition	Volume	File System	Capacity	Target
1	1	Ya	NTES	4.00 Gb	dlink-570412:isc
<		iiii			
orw//					
			11	. ////	
All 3			Mount		
	- Disk Mar Disk 1	1 1 (''') 4.006B	Disk Management Disk Partition Volume 1 1 Ya	Disk Management Disk Partition Volume File System 1 1 Y1 NTFS Image: Crime state	Disk Management Disk Partition Volume File System Capacity 1 1 Y:\ NTFS 4.00 Gb 4.00 Gb (Y:) 4.00 GB NTFS Delete UnMount

Mounting Disks

When a partition is not mounted, a * (star) symbol will appear in the Volume column in the **Disk Management** list.

Carry out the following steps to mount a disk:



	Disk Man	C Disk Management					
The mounted disk is displayed in	Disk	Partition	Volume	File System	Capacity	Target	
isk Management list.	1	1	X:1	NTES	4.00 Gb	dlink-570412;iso	
			1003		1	1	
					<u>A</u>		
	(X:1) 4.00GB NTFS						
	💈 My Con						
		View Favorites To		ers 🕼 🎲 🗙 🗳)		

in the My Computer window and can be used as if it was a locally attached disk.

💈 My Computer				
File Edit View Favorites Tools Help				4
🔇 Back - 🕥 - 🎓 🔎 Search р	Folders	× 🖌 📖 -		
• • • • • •	Cab. Car.			
Address 😼 My Computer				💌 🄁 G
Name	Туре	Total Size	Free Space 🔺	Comments
😹 31⁄2 Floppy (A:)	31/2-Inch Floppy Disk			
CD Drive (F:)	CD Drive			
sharefolder on 'ShareCenter Pro 1200 (dlink-570				
≫iSCSI (X:)	Local Disk	3.99 GB	3.97 GB	
Local Disk (D:)	Local Disk	24.4 GB	5.04 GB	
Win2ksp4 (C:)	Local Disk	29.2 GB	16.3 GB	
Data2 (E:)	Local Disk	22.9 GB	20.3 GB	
Shared Documents	File Folder			
Piktar's Documents	File Folder			

Hot-swap Function

The ShareCenter supports hot-swap drive trays. You can eject or insert 3.5" SATA hard drive(s) when the ShareCenter is operating.

However, if the hard drives are created into various levels of RAID, you cannot hot swap all the hard drives at the same time. Hot swapping all the hard drives will cause a loss of data, and the RAID volume will need to be re-created again. Different levels of RAID required various numbers of hard drives remaining in the ShareCenter.

Standalone/JBOD/RAID O: The data will be lost and the volume will crash, if any of the hard drives are hot swapped.

- **RAID 1:** You can hot swap the hard drives as long as one of the hard drives in the mirror is still in the ShareCenter. Removal of all hard drives will result in a loss of all data and volume will have crashed.
- **RAID 5:** In a RAID 5 volume, it is only possible to hot swap 1 hard drive at a time without losing all data. This is because a RAID 5 volume can only tolerate the loss of 1 hard drive and still continue to work. After hot swapping a hard drive, the volume must first be rebuilt before another hard drive can be hot swapped, otherwise this will also result in a loss of all data and the RAID volume will have crashed.
- **RAID 6:** In a RAID 6 volume, it is possible to hot swap 2 hard drives at a time without losing all data. This is because a RAID 6 volume can only tolerate the loss of 2 hard drives and still continue to work. After hot swapping 2 hard drives, the volume must first be rebuilt before another hard drive can be hot swapped, otherwise this will also result in a loss of all data and the RAID volume will have crashed.

You can check the RAID configuration from the **Disk Management** -> **Volume** page on the Web UI. When hot swapping hard drives, you will see the changes in the **Disk(s)** column. Hot swap one of the hard drives, make sure the Disk number has disappeared from the **Disk(s)** column, and then hot swap the next hard drive.

Storing non-English Character Files

By default the ShareCenter will support Unicode which is an industry standard allowing computers to consistently represent and manipulate text expressed in most of the world's writing formats.

CE Mark Warning:

This is a Class A product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

FCC Statement:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

For detailed warranty information applicable to products purchased outside the United States, please contact the corresponding local D-Link office.