

Seagate Business Storage 1-Bay, 2-Bay, and 4-Bay NAS User Guide



Seagate Business Storage NAS User Guide

© 2013 Seagate Technology LLC. All rights reserved. Seagate, Seagate Technology, the Wave logo, and FreeAgent are trademarks or registered trademarks of Seagate Technology LLC, or one of its affiliates. All other trademarks or registered trademarks are the property of their respective owners. When referring to hard drive capacity, one gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one thousand billion bytes when referring to hard drive capacity. In addition, some of the listed capacity is used for formatting and other functions, and thus will not be available for data storage. Quantitative usage examples for various applications are for illustrative purposes. Actual quantities will vary based on various factors including file size, file format, features, and application software. Seagate reserves the right to change, without notice, product offerings or specifications.

Seagate Technology LLC 10200 S. De Anza Boulevard Cupertino, CA 95014 U.S.A

Contents

1.	Preface	. 5
	About This Guide	. 5
	Computer Requirements	. 5
	Software	
	Supported Web Browsers	
	Finding More Information	. 6
2.	All About the Seagate Business Storage NAS	. 7
	Introduction	. 7
	About the Seagate Business Storage NAS	. 7
	What You Can Do With the Seagate NAS	. 7
	About Seagate NAS Users	. 8
	How to Get Started	. 8
2	Cotting Started with Your Segante Rusiness Storage NAS	11
J.	Getting Started with Your Seagate Business Storage NAS	
	Getting Started as a Seagate NAS User Optional Steps	
	Creating a Seagate Global Access Account	
4.	Using Your Seagate Business Storage NAS	
		15
	Understanding Your Seagate NAS User Account	15
	Storage Space Limitations	
	Grace Time Limits for Quotas	
	Accessing Shared Folders and Files on the Seagate NAS	17
	Backing Up Your Files	17
	Backing Up Files with Seagate NAS Backup	
	Using the Time Machine to Protect Files	18
	Accessing Files on Your Seagate NAS Over the Web	18
	Downloading Large Web Files to Your Seagate NAS	19
	Retrieving Deleted Files from the Recycle Bin	19

Accessing the Wiki Server on the Seagate NAS		
5. Solving Problems		
General Troubleshooting Tips 21		
Common Problems and Solutions 21		
I can't connect to the Seagate NAS over the local network		
I can't connect to the Seagate NAS over the Web		
I can't open NAS Manager 21		
I can't log in to NAS Manager 21		
I can't access a shared folder 22		
I can't access a file on a shared folder		
I can't store any more files on a shared folder because its volume is full		
I can't get streaming music from the Seagate NAS		
A volume is in degraded mode		
6. Glossary		

1. Preface

- About This Guide
- Computer Requirements
- Finding More Information

About This Guide

This *User Guide* is for users only. Your administrator should have already set up your Seagate NAS, created a user account for you, and provided you with information to help you quickly get started using the Seagate NAS on your network to back up your computer files and access and share information.

Computer Requirements

Any computer that will access your Seagate NAS must meet these requirements:

Software

A Microsoft Windows[®] or Apple Macintosh[®] computer running one of these operating systems:

- Windows XP, Windows Vista[®], Windows 7 or Windows 8, and with the latest Service Pack installed
- Mac OS X 10.4.11 or later

Supported Web Browsers

- Microsoft Internet Explorer 8 or newer
- Apple Safari 3, 4 or newer (Windows or Mac)
- Mozilla Firefox 3 or newer (Windows or Mac)

Hardware Requirements

- Local area network (LAN) or wireless LAN (WLAN)
- Network switch or router, with at least one available 10/100/1000 Ethernet port
- Internet connection (for remote access to NAS and software and firmware updates)
- Ethernet port on your PC

Finding More Information

Contact your administrator to obtain more information about your Seagate NAS. Additionally, review these documents to help you back up your data and access your data remotely:

- Seagate NAS Backup User Guide
- Seagate Global Access User Guide

For more information, please refer to the Seagate Web site at www.seagate.com/support.

2. All About the Seagate Business Storage NAS

- Introduction
- About the Seagate Business Storage NAS
- What You Can Do With the Seagate NAS
- How to Get Started

Introduction

This chapter introduces your Seagate Business Storage NAS and describes what you might want to use your Seagate NAS for.

About the Seagate Business Storage NAS

The Seagate Business Storage NAS is a file server, a device that is used for storing and sharing all types of computer files on a local network. The Seagate NAS can contain from one to four Serial ATA (SATA) disk drives and has built-in data protection to help keep your data safe from disk drive failures and other catastrophes.

The Seagate NAS comes with software to help you back up, store, protect, and share your files.

The Seagate NAS is typically used by small business owners and people with home offices who want to store and protect the computer files that are important to them—client files, business records, financial information, and so on—and make them available to other people on their local network or over the Internet.

If you'll be accessing the Seagate NAS directly (inserting USM drives or attaching USB device storage for backups), review the Quick Start Guide included with the product to understand the hardware components of your NAS. Additionally, you can download the Quick Start Guide for your Seagate NAS at www.seagate.com/support.

What You Can Do With the Seagate NAS

In general, you can use your Seagate NAS to:

- Create a central storage place for the files you want to share with other people on your local network or over the Internet.
- Create and maintain automatic backup copies of all your files—even your operating systems.

- Share your files—contracts, business presentations, progress reports, and so on—with other people on your local network or with business clients over the Internet.
- Recover quickly from a computer disaster, such as the unintentional deletion of important files, the failure of a disk drive, the loss or theft of your computer.
- Access your Seagate NAS over the Internet from anywhere in the world to download files that you need where you are, or upload files that you want to secure or share while you're out of the office.
- Share a USB printer with other people on your local network.
- Store and share your photos, videos, and music for everyone on your local network to enjoy.

Note: Your Seagate NAS administrator must set up your Seagate NAS as a media server in order for you to store and share your media.

About Seagate NAS Users

As a Seagate NAS user, your tasks generally include:

- Changing your login password
- Saving and sharing files on the Seagate NAS
- Backing up files to the Seagate NAS
- Accessing the Seagate NAS over the Web or from a mobile device, using Seagate Global Access
- Downloading large Web files directly to the Seagate NAS
- Accessing music, video, and photos (if the Seagate NAS is set up as a media server)
- Sharing a USB printer that's connected to the Seagate NAS (if any)

How to Get Started

This section describes the getting-started tasks for Seagate NAS users.

- 1. Ensure that you have these items from the Seagate NAS administrator:
- The Seagate NAS Discovery software
- The Seagate NAS Backup software
- Your Seagate NAS log in name and password
- The names of the shared folder(s) that you can access
- A description of any access limitations you have (for instance, read-only access to a particular folder share)

2. Install the Seagate NAS software (see page 11).

Note: You don't need to install the Seagate NAS Backup software if you are already using other software for regular file backups.

- Connect to the server and the shared folders you have access to using Seagate NAS Discovery (see page 11).
- 4. Share your files by saving them to shared folders that can be accessed by other people on your local network or over the Web.
- 5. *(Optional)* Create a full backup of your important files, or set up recurring backups, using Seagate NAS Backup (see page 17).
- 6. *(Optional)* If a USB printer has been connected to the Seagate NAS, add it to your list of available printers, following your operating system's instructions.

3. Getting Started with Your Seagate Business Storage NAS

Getting Started as a Seagate NAS User

Follow the steps in this section to get started with your Seagate NAS.

- 1. Ensure that you have received these items from the Seagate NAS administrator:
 - The Seagate NAS Discovery software
 - Your Seagate NAS log in name and password
 - The Seagate NAS Backup software (optional)
 - The names of the shared folders that you can access
 - A description of any access limitations you have (for instance, read-only access to a particular share)
- 2. Install the Seagate NAS software.

Install both the Discovery *and* Backup software, unless you are already using another backup software program or have a Mac and are using the Time Machine for backup.

- 3. Connect to the Seagate NAS and the shared folders you have access to using Discovery.
 - (Windows) Double-click the Discovery icon on your desktop.
 - (Mac) Double-click the Discovery icon in your Applications folder.

When Discovery opens, it automatically searches for all Seagate NAS devices on your network and displays them in a list.

4. Select your new Seagate NAS.

A list of shared folders on the server appears.

- 5. Scroll through the list of shared folders and then do one or more of the following:
 - To view shared folders, select the shared folder and then click View Share Details.
 - To map a shared folder, select the share you want, then select a computer drive, and then click **Map Drive**.
 - If you have access to more than one shared folder, continue to find and map additional shared folders as needed.

- **Note:** You can mount/map as many public and private shared folders as you need to. However, to mount/map more than one *private* share, each private share must have the same log on credentials.
- 6. Save your files to shared folders that can be accessed by other people on your local network or over the Web.

Optional Steps

- *(Optional)* Create a full backup of your important files, or set up recurring backups, using the Backup software (see page 17).
- *(Optional)* If a USB printer has been connected to the Seagate NAS, add it to your list of available printers, following your computer's operating system instructions.
- (Optional) If your Seagate NAS administrator has enabled the Media Service on the server and you have access to the share where the music files are stored, install iTunes or DLNA-compliant software such as VLC Media Player on your computer and begin streaming music, following the instructions provided with the software.
- *(Optional)* If your Seagate NAS administrator has enabled Global Access on the Seagate NAS, sign up for a free Global Access account so you can access your files over the Web. See "Creating a Seagate Global Access Account" on page 12.
- (*Optional*) If your Seagate NAS administrator has enabled the Wiki server on the Seagate NAS, you can open a Wiki page and share information with other users. See "Accessing the Wiki Server on the Seagate NAS" on page 20.

Creating a Seagate Global Access Account

Seagate Global Access is a service that you can use to view, download, share, and work with the files stored on your Seagate NAS from anywhere in the world, share files stored on a private shared folder, or share your files with anyone outside of your network.

Note: Check to see if your administrator has already set up your Global Access account before you begin.

To create a new Seagate Global Access account

Log into your the NAS Manager application with your username and password. Go to **Sharing > Global Access.**

Click the **Enable** checkbox. Supply the following information:

- User: Select your username from the drop-down list.
- Email: Enter your email address. You will receive a notification via email to help you complete the setup of your Seagate Global Access account.

- Password: Enter a password. This is the password you will use to access Seagate Global Access remotely.
- Click Submit to create the account.

To register an existing TappIn account with Seagate Global Access

The following steps assume you have a TappIn account and want to use it to access information on your Seagate NAS.

Log into the NAS Manager application with your username and password. Go to **Sharing > Global Access.**

Click the **Enable** checkbox. Supply the following information:

- User: Select your username from the drop-down list.
- Email: Enter the email address used to create the TappIn account. You will receive a
 notification via email to help you complete the registration of your Seagate Global Access
 account.
- Password: Enter a password. This is the password you used to set up the TappIn account.
- Click **Submit** to create the account.

Note:	When you click Submit, you are associating your username on the Seagate NAS with an
	existing TappIn account to obtain access to Seagate Global Access.

Review the *Seagate Global Access User Guide* for more information. After you've enabled your user account for Seagate Global Access, you can also download an app to your mobile device to access content on your Seagate NAS. Currently, Seagate Global Access supports Apple[®] and Android[®] mobile devices. To download Quick Start Guides and User Guides for these mobile devices, go to *http://www.seagate.com/software/globalaccess/*.

4. Using Your Seagate Business Storage NAS

- Introduction
- Understanding Your Seagate NAS User Account
- Accessing Shared Folders and Files on the Seagate NAS
- Backing Up Your Files
- Accessing Files on Your Seagate NAS Over the Web
- Downloading Large Web Files to Your Seagate NAS
- Retrieving Deleted Files from the Recycle Bin

Introduction

This chapter provides tips and information that will help Seagate Business Storage NAS users get the most out of the device.

You can:

- Store your files on the Seagate NAS and share them with others.
- Back up your files, applications, and even operating systems using Seagate NAS Backup.
- Access your Seagate NAS files over the web using Seagate Global Access (if enabled).
- Download large web files directly to the Seagate NAS using the Seagate NAS Downloader Manager.
- Retrieve accidentally deleted files from the Seagate NAS Manager Recycle Bin (if enabled).

Understanding Your Seagate NAS User Account

This section describes the features and possible limitations of your Seagate NAS user account.

Access Limitations

Shared folders on the Seagate NAS can be either public (open to everyone, with some restrictions) or private (restricted to selected user accounts).

See your Seagate NAS administrator to find out what your access limitations are.

Private Shared Folders

Private shared folders are password protected and restricted to use by individuals designated by your Seagate NAS administrator.

Once the Seagate NAS administrator creates a user account, you can limit access to a private shared folder by:

- · Limiting access to this share to specified Seagate NAS users only.
- Limiting some Seagate NAS users to read-only access. Read-only access means that you can view files on the share, but can't edit those files or upload your own files to the share.

You have full access to your private shared folder, which allows you to save and back up your files to the shared folder, edit files on the shared folder, and download any files from the shared folder to your computer or to a USB/USM drive connected to the Seagate NAS.

Note: To mount/map more than one *private* shared at a time, each private share must have the same log on credentials.

You can grant other people access to some or all of the files on your private shared folder locally, or remotely, by using Seagate Global Access. See page 12 for more information and for instructions on setting up a Seagate Global Access account. Refer to the *Seagate Global Access User Guide* for help granting other people access to your private share.

Public Shared Folders

Public shared folders are not restricted, and you can mount/map as many public shared folders as you need to.

Storage Space Limitations

Your Seagate NAS administrator can limit the amount of storage space you're allowed to use on a specific shared folder.

You may have space limitations on one shared folder but not on another; you may have more space to use on one shared folder and less on another. Or, you may have no space limitations at all—except for the maximum storage space on the Seagate NAS itself.

See your Seagate NAS administrator to find out if you have any storage space limitations, and what those limitations are.

If you fill your allocated storage space, either remove older or unneeded files to make more room, or see your Seagate NAS administrator to have more storage space assigned to you.

Automatic Sorting for Media Files

Shared folders on your Seagate NAS may be set to automatically sort media files to a specific location on your computer, based on the type of files. For instance, when you download music files, they would automatically be placed in a folder called Our Music.

See your Seagate NAS administrator to find out if the shared folders that you can access have automatic download sorting enabled.

Grace Time Limits for Quotas

If there is a storage quota for your account, your Seagate NAS administrator can set a grace time limit, which allows a quota to exceed its storage limitations for a period of time. Once the grace date is reached, no additional files can be added until space is made available.

See your Seagate NAS administrator to find out if your user account has any grace time limits for stored files.

Accessing Shared Folders and Files on the Seagate NAS

After you have connected to the Seagate NAS, and mounted/mapped the shared folders you can access, you can immediately begin saving files to the Seagate NAS.

Note: You can mount/map as many public and private shared folders as you need to. However, to mount/map more than one *private* share, each private share must have the same log on credentials.

You can access the shared folders on your Seagate NAS:

- Locally, the way you would access any network drive on your computer (for instance, using Windows Explorer). See page 11 for help mounting/mapping shared folders to your computer.
- Remotely, over the Web, using Seagate Global Access (if your Seagate NAS administrator has enabled Global Access on the Seagate NAS). For more information about Global Access, see page 12.

Once you have successfully accessed a shared folder, you can view and download files from the shared folder, and upload and back up files to that shared folder, if you have permission (see page 15).

See your Seagate NAS administrator for help getting access to the shared folders you need and understanding your viewing, downloading, and uploading permissions.

Backing Up Your Files

To protect your important files from loss, corruption, or accidental deletion, you should complete and maintain regular file backups using Seagate NAS Backup.

You can also back up files by downloading them from your Seagate NAS to an external USB/ USM drive, or uploading them from a USB/USM drive to the Seagate NAS.

Backing Up Files with Seagate NAS Backup

Seagate NAS Backup is a full backup software application with a wide range of features that let you customize a backup system to suit your needs.

Note: Seagate Backup software supports personal computers running Windows[®] operating systems only.

You can use Seagate NAS Backup to start a backup whenever you want. You can also use Seagate NAS Backup to set up recurring backups that can take place at convenient times (for instance, overnight or on the weekends, when you aren't using your computer).

You can use Seagate NAS Backup to protect all the files, applications, and even the operating system on your computer.

If you haven't already installed Seagate NAS Backup, see page 11 for instructions.

For more information, refer to the Seagate NAS Backup User Guide.

Using the Time Machine to Protect Files

If you are a Mac user, verify that your Seagate NAS administrator has enabled the Seagate NAS as a Time Machine[®] target:

- While logged into your Mac, open Time Machine preferences.
- Click Select Disk...
- Select .TMBACKUP
- Enter your Seagate NAS user name and password.

Backup will start automatically.

Accessing Files on Your Seagate NAS Over the Web

If your Seagate NAS administrator has enabled Global Access on the Seagate NAS, sign up for a free Global Access account so you can access files on your Seagate NAS over the Web.

Seagate Global Access is a service that you can use to view, download, and work with the files stored on your Seagate NAS from anywhere in the world, share files stored on a private share, or share your files with anyone outside of your network.

With Global Access, you can:

- Download important business files or presentations from a client's office anywhere in the world.
- Share files with clients without requiring them to use an FTP application.

- Upload important files from your laptop so that you know they're safe while you continue to travel.
- Grant other people access to files on your private share.

To access your Seagate NAS over the Web:

- Ensure that Global Access is enabled on the Seagate NAS. See your Seagate NAS administrator to find out more.
- Create a Global Access account. Anyone who wants to access the Seagate NAS over the Web must have their own Global Access account. (Accounts are free.)

See page 12 for instructions on setting up a Global Access account. Refer to the *Seagate Global Access User Guide* for help granting other people access to your private shared folder(s).

Downloading Large Web Files to Your Seagate NAS

Seagate NAS Manager includes a special tool for downloading large files directly to the Seagate NAS from FTP and other sites on the Web. This tool is called the **Downloader Manager**, and it allows your Seagate NAS administrator to manage when large Web downloads take place so that the Seagate NAS isn't overwhelmed.

Downloader jobs may not begin immediately. Web downloads take place automatically in the order in which they appear in the Downloader Manager queue (which can be adjusted by your Seagate NAS administrator), so if your job isn't first in line, it won't start right away.

Additionally, your Seagate NAS administrator can also impose limits on when Web download jobs can take place and how many can take place simultaneously (never more than three). Seagate NAS administrators can limit Web downloads to evenings, weekends, or other quiet times in the week.

See your Seagate NAS administrator to find out when you can download Web files using the Downloader Manager, or to have your existing download job moved up in the Downloader queue.

Retrieving Deleted Files from the Recycle Bin

Shared folders on your Seagate NAS may be protected by the NAS Manager Recycle Bin. When the Recycle Bin is enabled on a shared folder, NAS Manager saves files deleted from the shared folder so that they may be retrieved if you need them back.

If you accidentally delete a file, open NAS Manager (see page 11) and go to **Storage > Recycle Bin Manager**. For instructions for retrieving deleted files, refer to the NAS Manager online Help.

Accessing the Wiki Server on the Seagate NAS

The Seagate NAS administrator may enable the Wiki server on the NAS. The Wiki server is a local web site on the Seagate NAS that can be used for information sharing and collaboration. When the Wiki server is enabled, all Seagate NAS users have access to this site.

To access the Wiki server, open NAS Manager (see page 11), and go to **Sharing >Wiki Server**. Click the **Go to Wiki Server** button to open the Wiki server in a new browser window. For information about using the Wiki server, click **wiki** on the left side of the page, then click **dokuwiki**.

5. Solving Problems

This chapter provides solutions to the most common problems you may encounter while using your Seagate Business Storage NAS:

- General Troubleshooting Tips
- Common Problems and Solutions

General Troubleshooting Tips

If you have problems setting up or using your Seagate NAS, follow these suggestions:

- Ensure that your network is functioning properly.
- Ensure that the Seagate NAS is properly connected to a power source and turned on.
- Ensure that your computer meets the Seagate NAS system requirements. See "Computer Requirements" on page 5 for more information.
- Ensure that your computer is running a supported Web browser. See "Computer Requirements" on page 5 for a list of supported browsers.
- Ensure that you are logging in with the correct user name and password. (Remember that passwords are case-sensitive.)

Common Problems and Solutions

This section provides solutions to common problems that may occur in NAS Manager.

I can't connect to the Seagate NAS over the local network.

- Check that the Seagate NAS is powered on and connected to the network.
- Try connecting to the Seagate NAS from a different computer.

I can't connect to the Seagate NAS over the Web.

Check that the Seagate NAS administrator has enabled Global Access.

I can't open NAS Manager.

Check that the Seagate NAS is powered on and connected to the network. Run Seagate NAS Discovery and try to reconnect with the Seagate NAS, then launch the NAS Manager.

I can't log in to NAS Manager.

Ensure that you are using a valid user name and password. Remember that user names and passwords are case-sensitive.

I can't access a shared folder.

- Ensure that you have access to that shared folder.
- Ensure that you are using a valid username and password. Remember that usernames and passwords are case-sensitive.
- The volume that contains the shared folder may be degraded because of a disk drive error or failure. Check the status of the disk drives on the Seagate NAS; see the Seagate Business Storage NAS Administrator Guide for more information.

I can't access a file on a shared folder.

Ensure that you are allowed access to that file.

The volume that contains the share may be degraded because of a disk drive error or failure. Check the status of the disk drives on the Seagate NAS; see the *Seagate NAS Administrator Guide* for more information.

I can't store any more files on a shared folder because its volume is full.

If you are a user, see your Seagate NAS administrator.

If you are an administrator, consider removing some of the files currently stored on the Seagate NAS.

I can't get streaming music from the Seagate NAS.

Ensure that you have iTunes or installed on your computer, or are using a DLNA-compliant device or software. Ensure that you are using a computer that's connected to the local network. Ensure that you have access to the share where music files are stored, and that the administrator has enabled the Media Service for the Seagate NAS.

A volume is in degraded mode.

A disk drive may have failed. For further assistance, contact your Seagate NAS administrator.

6. Glossary

access level

Also known as permission level, the amount of access any person has to the Seagate NAS. Seagate NAS Manager has two permission levels: *administrator* and *user*.

administrator

A Seagate NAS administrator is responsible for the Seagate NAS and all its settings. An administrator can set up or delete user accounts, group accounts, and shared folders; assign or remove access permissions; modify any setting on the server; and create other administrators. See also user.

archive backup

See RSA key.

CIFS

Common Internet File System. A file system that lets people with different computers running Windows operating systems share files without having to install special software.

domain

A group of computers administered as a single unit from a central location.

event

A problem or change in setting on the Seagate NAS. A change in the server's name or the failure of a disk drive are both server events.

external USB hard drive

See USB drive

firmware

Software that's built into hardware.

format

To format a disk drive is to prepare it for reading and writing data. Formatting erases background information from a disk drive, tests it, and prepares it for use. Formatting may destroy existing files on a disk drive. You must format a disk drive before you can use it.

FTP

File Transfer Protocol. A format for exchanging files over the Internet. FTP is commonly used to upload files to or download files from a server over the Internet.

group account

In Seagate NAS Manager, a collection of user accounts grouped together to make it faster and easier to manage access to shared folders. All users in a group have the same level of access to any particular share. See also user account.

hot-swap

To remove and replace a disk drive without first powering off the server.

HTTP (Hypertext Transfer Protocol)

Rules for exchanging the most common form of documents (hypertext documents) over the Internet.

HTTPS (Hypertext Transfer Protocol over Secure Socket Layer)

Rules for exchanging HTTP documents over encrypted connections.

JBOD

Just a Bunch of Drives. See span.

IP address

The identifier of a computer, server, or other device on a TCP/IP network. IP addresses are a sequence of four numbers separated by periods. (For example, 123.456.78.1.) Every device on your local network has a unique IP address.

link aggregation

A method of increasing the speed of a device's network connection by using more than one Ethernet port simultaneously to connect to the network.

If you connect both of your Seagate NAS LAN ports to your network router or switch and set Aggregation in Seagate NAS Manager, both connections work simultaneously and in parallel to move data more quickly—similar to filling a bucket using two hoses instead of one.

local access

Access to the server from a computer on your local network. Or, manual access to the server, which involves physical contact with the server or its cables. See also remote access.

mirror

A level of RAID protection also known as RAID 1. A mirror is built from two disk drives, where one disk drive is a mirror of the other (the same data is stored on each disk drive). Compared to independent disk drives, a mirrored volume provides faster performance, but has only 50% of the capacity.

NFS

Network File System. An application that lets all users on a network share files that are stored on different types of computers.

NTP (Network Time Protocol) server

Synchronizes the date and time of computers and servers on a network, based on Coordinated Universal Time (UTC).

parity

Data created in volumes with RAID 5 protection that's used to reconstruct files if one of the disk drives in the server fails. See also RAID 5.

private share

A folder that is accessible only to users with permission granted by the share's owner.

RAID

Redundant Array of Independent Disks. A technology that combines disk drives together for improved performance and fault tolerance (the ability to withstand the failure of a disk drive).

RAID 0

See stripe.

RAID 1

See mirror.

RAID 10

A level of RAID protection. A volume with RAID 10 is built from two or more equal-sized RAID 1 volumes. Data in a volume with RAID 10 is both striped and mirrored. Mirroring provides data protection, and striping improves performance. See also mirror, and stripe.

RAID 5

A level of RAID protection. A volume with RAID 5 is built from a minimum of three disk drives, and uses data striping and parity data to provide redundancy. (Parity is extra information that's used to re-create data if a disk drive fails. In volumes with RAID 5, parity data is striped evenly across the disk drives with the stored data.) Parity data provides data protection, and striping improves performance. See also stripe.

remote access

Access to the server from a computer that is not on your local network. For instance, accessing the server from a client's computer, over the Internet, is remote access.

Remote access can also refer to shutting down or resetting the server using Seagate NAS Manager instead of physically pressing the Power button. See also local access.

RSA key

An encryption decoder that's part of SSL, a type of encryption used to protect data being sent over a network or the Internet. "RSA" stands for Rivest, Shamir, and Adelman, who invented the technology.

Seagate Global Access

A service that you can use to view, download, share, and work with the files stored on your Seagate NAS server from anywhere in the world. You can also use Global Access to upload files to your Seagate NAS server.

server

A computer or device on a network that manages resources. The Seagate NAS server is a file server, a storage appliance that's dedicated to storing files; it can also be used as a print server, a device that manages one or more printers.

shared folder

A shared folder on your Seagate NAS server that stores and protects backup files, as well as other files that can be accessed by other people.

SMART

Self-Monitoring Analysis and Reporting Technology. Technology built into disk drives that let them automatically monitor their own health and report on possible problems. Not all disk drives have SMART support.

span

A group of disk drives collected in a server, not protected by RAID. Also known as JBOD. See also RAID.

spin down

Referring to disk drives, a term that means to stop spinning.

SSL certificate

Secure Socket Layer certificate, part of the SSL encryption method. SSL (also known as Transport Layer Security) is a type of encryption used to protect data being sent over a network or the Internet. SSL uses a system of keys, like secret passwords, to send and receive files securely.

stripe

Also known as RAID 0. A volume with striping includes two or more disk drives where data is distributed evenly (striped) across the disk drives in equal-sized sections. A striped volume does not maintain redundant data, and so *offers no data protection*.

However, compared to an equal-sized group of independent disks, a striped volume provides faster performance.

UPS

Uninterruptible Power Supply. A power supply that has a battery in it that maintains power to a computer or server in the event of a power failure. A UPS is intended to provide enough

power for you to save whatever files you're working on and properly power off the computer or server; it's not meant to keep any system running for the duration of a power failure.

USB

Universal Serial Bus. The interface between your computer and the USB devices you plug into it. Your computer communicates with USB devices through the USB interface.

USB drive

A portable disk drive that connects to a computer with a USB cable, instead of being installed inside the computer itself. Also known as a thumb drive, jump drive, flash drive, or external USB hard drive.

user

In Seagate NAS Manager, a person who can save, back up, and share files using the Seagate NAS server, but who can't modify user account, group account, share, or server settings.

user account

An account, with a user name and password, that a person uses to access the Seagate NAS server. User accounts have access level permissions associated with them.

volume

Data storage space that can be made up of one or more disk drives, or of only part of a single disk drive.

Web access protocol

The rules for sending information over the Internet. Your Seagate NAS server has two Web access protocol choices, HTTP and HTTPS.

workgroup

A collection of computers on a network that share resources.