

Active Backup for Business Admin Guide for File Servers

Based on Active Backup for Business 2.5.0



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Introduction

About this guide

This guide will help you become familiarized with Active Backup for Business, walk you through the initial setup of a backup task, and provide information on recovery.

Intended audience

This guide is intended for anyone who wants to start using Active Backup for Business to back up their SMB or rsync file servers.

What is Active Backup for Business?

Synology's all-in-one commercial data protection solution, **Active Backup for Business (ABB)**, is based on the award-winning DSM operating system. ABB centralizes data protection across a variety of IT environments, including virtual machines, physical servers, file servers, and personal computers. Administrators can deploy their preferred protection plan single-handedly through ABB's centralized admin console.

ABB also offers a wide range of backup options and restoration tools, as well as a number of optional technical and safety features.

Why should you use Active Backup for Business?

- Your one-stop-backup solution – Ensuring that everything in your backup environment is compatible can be a challenge, especially with so many factors to consider. ABB simplifies things by providing an all-in-one solution right on your Synology NAS.
- Smart storage – ABB is designed with cross-platform, device, and version deduplication to help reduce backup time and improve storage efficiency. ([See applicable models](#)).
- Unrestricted expand-ability – Increasing your number of devices and data? No problem. With ABB, you can protect an unlimited number of devices and data, license-free.
- Centralized management – Remove the burden on IT workers of managing backup tasks and devices across several platforms by using ABB's intuitive, web-based portal.
- Integrated support – When something goes wrong, whether it's hardware or software-related, Synology Technical Support is ready to help, reducing the time and effort needed when looking for help from different providers.

Features and Management Tools

Backup and recovery features

Support for SMB and rsync

Active Backup for Business supports file server backups via common protocols such as SMB for Windows and rsync for Linux devices, making it easy to deploy your backups without needing to install an agent.

For SMB servers

FSRVP (File Server Remote VSS Protocol) integration helps to ensure the consistency of SMB server backups. When VSS is enabled on the Windows server, Active Backup for Business can create a shadow copy of VSS-enabled server applications that store data on remote SMB file shares. In addition to file backups, you can also back up Windows ACL, allowing you to easily restore files and access control lists at the same time.

For rsync servers

You can enable block-level transfer, encryption, compression, and bandwidth control, enjoying safe and efficient transfers for rsync server backups. In addition to file backups, Linux POSIX ACL can also be backed up.

Backup modes

There are three backup modes for file server backups that can be used to meet each organization's data protection, retention, and auditing policy requirements:

- **Multi-versioned:** Offers multiple recovery points by creating a new version for each backup, allowing you to easily recover files from any previous point in time.
- **Mirroring:** Suitable for users that need only the most recent version of their files, as it overwrites the backup on the target based on the changes made on the source.
- **Incremental:** Ideal for archival purposes, since the backup will be overwritten by the newly added and modified files, while keeping the deleted files on the target device.

Incremental backup

Incremental backup is a backup feature that reduces the amount of data transferred for each backup, as well as the amount of duplicated data stored on your backup destinations. This is done by tracking changes and only backing up modified or new data to be added into the destination.

Backup management

Active Backup for Business Portal

The **Active Backup for Business Portal** is ABB's affiliated restoration portal. This portal allows administrators and end users appointed by an administrator to access, browse, download, and restore backed-up data.

This tool is automatically installed during the installation of the Active Backup for Business package. Refer to the [ABB Portal help article](#) to learn more about how to navigate the portal, perform restores, and for other settings.

Planning and Preparation

Requirements

See the [full specifications for Active Backup for Business](#) for detailed information.

NAS system requirements

See [How to select a suitable NAS for running Active Backup for Business?](#) for recommendations.

Item	Requirements
Operating system	<ul style="list-style-type: none">• DSM 7.0 and above (ABB 2.2.0 and above)• DSM 6.2 and above (ABB 2.1.0 and above)• DSM 6.1.7 and above (ABB 2.0.4 and above)
CPU architecture	64-bit x86 (x64)
System memory	4 GB RAM recommended for ideal backup performance
File system	Btrfs

Supported systems

Backup type	System / version
File Server	<ul style="list-style-type: none">• SMB protocol• rsync 3.0 and above

For a full list of requirements for backups and restorations, refer to the [Requirements and Limitations](#).

Considerations and limitations

NAS

- To maximize backup performance, avoid running too many packages at once in DSM.
- To perform a backup task, there should be at least 8 GB of free space both on the backup destination and on the volume where the package is installed.

Backup client (file servers)

- Make sure that the file sharing protocol, either SMB (for Windows) or rsync (for Linux), is enabled on the source file server.
- Make sure that the account used to add the file server has permission to access the folder that you want to back up.

Backup tips

- Do not use the backup destination folder to store your files or other data that are not from the file server source. During a backup, any files or data that cannot be found on the source side when comparing the directory and the backup source will be deleted.
- Only **Multi-version mode** will create several backup versions of your backup task. The other two backup modes will only keep a single version of your backup task.
- Make sure that the [device that you want to back up is supported](#) on your version of ABB.
- Set up a **Retention Policy** for your backup tasks to delete older backup versions so your backups don't take up too much space on your multi-version task only.
- Configure a **backup schedule** to maintain regular backups of your data.
- Allow users access to the **Active Backup for Business Portal** so they can browse backups and recover individual files or entire folders as needed.
- Add a second layer of protection to your data by implementing the [3-2-1 backup rule](#) (3 backups: 2 on different storage mediums and 1 offsite) using **Hyper Backup** or **Snapshot Replication**.

Backup Configuration

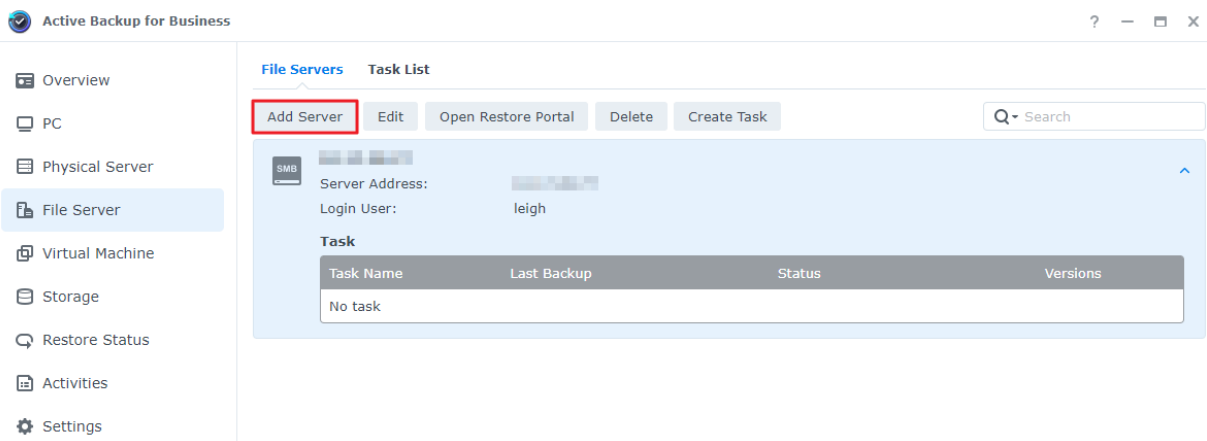
The following sections provide instructions on adding file servers, creating and executing new backup tasks, and configuring options and settings.

File Server Backup

Add a file server

Before creating a file server backup task, you must connect to a file server:

1. In DSM, go to **Active Backup for Business > File Server > File Servers** and click **Add Server**.



2. Follow the instructions in the wizard to finish adding your server.

Notes:

- Make sure that **My Network Places** is enabled on the SMB server.
- Make sure that the [permission settings](#) are properly configured.

Create a backup task

1. In **Active Backup for Business**, go to **File Server > File Servers**.
2. Select the file server that you want to back up and click **Create Task**.
3. Follow the steps in the wizard to configure your backup mode, the folders you want to transfer, and a retention policy.

Select your backup mode

- **Multi-versioned:** Each time the task runs, a new version containing any changes made on the source will be copied in its entirety to a new folder on the destination.
- **Mirroring:** Each time the task runs, any changes made in the source folder will be copied to the destination, overwriting the existing file and making the destination folder a complete mirror-copy of the source.
- **Incremental:** Each time the task runs, newly added and modified files on the source will be copied to the destination, overwriting the previous version of the file.

Notes:

- For Linux sources, block transfers can be configured later on in the setup.

Refer to the following table for more details about the backup file variations for each backup mode:

Source files	Multi-version mode	Mirroring mode	Incremental mode
1st Backup: A B	ver.1 A B	A B	A B
2nd Backup: A B C	ver.1 A B ver.2 A B C	A B C	A B C
3rd Backup: A B C D E	ver.1 A B ver.2 A B C ver.3 A C D E	A C D E	A B C D E
4th Backup: A C D E	ver.1 A B ver.2 A B C ver.3 A C D E ver.4 A E	A E	A B C D E

Task settings

Indicate what you want to transfer using the following states:

- Subordinate folders or files in this folder will **not** be backed up.
- All subordinate folders and files in this folder will be backed up.
- Only selected subordinate folders and files in this folder will be backed up.
- All files in this folder, along with selected subordinate folders, will be backed up.

If you're configuring **rsync backup**, you will have the option to configure the **Bandwidth** as well as enable **compression** and **block transfer**.

If you selected **Multi-versioned** as your backup mode, you will have the option to set up a **Retention Policy** to manage backup versions by automatically deleting unwanted versions to free up storage space.

Select a retention policy

- You can choose to store all versions of a backup, limit the number of stored versions, or keep certain versions according to a schedule.
- You can choose to set rules for keeping backup versions, such as to retain the latest version of each day, week, month, or year. You can edit the retention policy at **Active Backup for Business > File Server > Task List > select the task > Edit > Retention > Advanced retention policy > Set Rules**.
- Selecting the **Keep only the latest ... versions** option will store a certain number of versions regardless of the time intervals set. If more than one backup version exists within a certain time range, only the latest one will be kept. For example, if you set a policy as **Keep the latest version of the day for "1" day** for a backup task that will run every hour, only the version backed up at 23:00 will be kept.
- A version can meet more than one retention rule at a time. For example, a version can be retained by the weekly retention rule and the daily retention rule at the same time. Advanced retention policy employs a **Long-Term Retention Policy (GFS)**.

Set Rules X

Apply the following rules to keep backup versions. One version can meet multiple rules at the same time. [Learn more](#)

<input checked="" type="checkbox"/> Keep all versions for	<input type="text" value="1"/> days
<input checked="" type="checkbox"/> Keep the latest version of the day for	<input type="text" value="7"/> days
<input checked="" type="checkbox"/> Keep the latest version of the week for	<input type="text" value="4"/> weeks
<input checked="" type="checkbox"/> Keep the latest version of the month for	<input type="text" value="12"/> months
<input checked="" type="checkbox"/> Keep the latest version of the year for	<input type="text" value="3"/> years

The system will ensure a certain number of latest versions are kept before applying the retention rules above.

Number of latest versions to keep versions

Cancel OK

Notes:

- Files cannot be backed up under the following circumstances:
 - The file/folder path is longer than 4096 characters.
 - The file/folder name is longer than 255 characters, is "." or "..", or contains @ActiveBackup or target.db.
 - The file/folder is within an encrypted shared folder and has a name that exceeds 135 characters.
- **SMB backup** does **not** support the backup of Microsoft accounts or [junction points](#).
- **SMB backup** supports the use of **Windows Volume Shadow Copy Service (VSS)** to ensure data consistency. Windows VSS is supported on Windows Server 2012 and above. When [VSS is enabled on the Windows server](#), Active Backup for Business can create a volume shadow copy of VSS-aware server applications that store data on remote SMB file shares.
- Administrative shared folders (E.g. C\$, D\$) do not support Windows VSS by default.
- Authentication by SSH key will require an SSH key. Supported key types include RSA2, DSA, ECDSA, and ED25519. RSA1 keys and SSH keys that require a passphrase are not supported.

Apply settings

1. Confirm your backup settings and click **Apply**. A pop-up window will appear.
2. Click **Yes** if you would like to run the backup immediately. If you want to run the task later on, go to the **Task List**, select the task, and click **Back up**.

Manage backup tasks

All existing tasks are displayed under **Active Backup for Business > File Server > Task List**.

Edit or delete backup tasks

To edit tasks individually or simultaneously, select one or several tasks (Ctrl + left click), and click **Edit**.

To delete backup tasks, select one or more tasks in the corresponding task list. Doing this will remove the backup tasks and their settings, but will **not** remove your backed up data.

Details




To view information on the **Status** and **Logs** for your task, such as the source, execution time, duration, and log time of backups, select your task and click **Details**.

Versions

To view information about backed up versions, such as the status and time of creation, select your task and click **Version**. You can also click the **folder** icon to browse your backed-up data.

Backup Version Information

X

	Time of creation	End Time	Backup Status	
	05/03/2021 15:17:03	05/03/2021 15:17:05	Successful	 

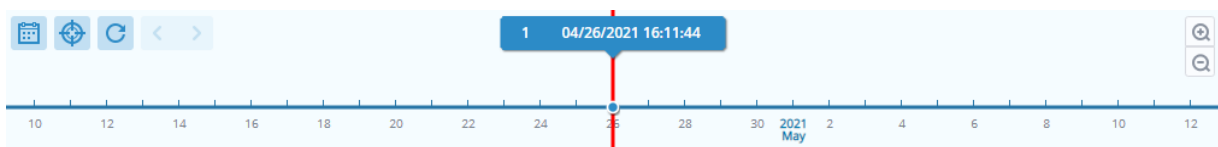
Restoration Guide

Recovery options

Granular (file or folder-level) restore: Choose a backup version, select files or folders for recovery in the **Active Backup for Business Portal** and automatically restore them to their original location, or download the data to a different device or location. You can also assign users restore or download permissions via **Control Panel** in DSM.

Restore file server data

1. In **Active Backup for Business > File Server**, select the task and click **Open Restore Portal**.
2. Under **View role** at the top of the page, select a user with the appropriate restoration privileges.
3. Under **Task**, confirm the source device to which or from which you want to restore files.
4. Select the folders or files that you want to restore.
5. Use the slider at the bottom of the page to select a backup version from which you wish to restore folders or files, then click through the folder structure in the file explorer to select the directory or file.



6. Choose if you want to **Restore** or **Download** the data. If you select **Restore**, your backup agent will download the files or folders and restore them to the specified location on your device. You can also choose if you want files with the same name to be skipped during the restoration by ticking the related checkbox. If you select **Download**, the selected files will be downloaded via your browser to your chosen download location.

You can view the progress of the restoration by clicking the **Restore Task** icon in the upper right-hand corner.

The screenshot shows the 'Active Backup for Business' interface. At the top, there's a navigation bar with 'View role: admin' and a 'Task' dropdown. A red box highlights a notification icon in the top right. Below is a breadcrumb '123 > ccc' and a 'Filter' input. The main section is titled 'Restore Task' and contains a table with the following data:

Device	Task Name	Restore ver.	Source	Destination	Status	Elapsed Time
10.17.2.20	FS 1	05/03/2021 1...	/123	/123	<div style="width: 50%;"></div>	00:00:00:03

Notes:

- To learn how to only back up and restore Microsoft SQL or Exchange servers, refer to the respective tutorials:
 - [Back up and restore Microsoft SQL servers](#)
 - [Back up and restore Microsoft Exchange servers](#)

Best Practices

The following sections provide recommendations for how you can protect your backup data against loss by creating remote backup copies and relinking.

Maintain remote backup copies and relink

Active Backup for Business safely stores backup data from all of your devices on your Synology NAS. However, issues that occur on one device can affect an entire infrastructure.

Natural disaster, theft, or network issues can prevent you from retrieving your data or slow down the recovery process. Therefore, we strongly recommend you to keep remote copies of all of your backups on a different device and in a different location.

Keep in mind that you should always maintain three copies of your data (the original copy, a backup, and a copy of that backup in a different location). This is referred to as the [3-2-1 backup strategy](#). To make things easy, Synology NAS has everything you need to implement this strategy.

Create remote copies

The following two DSM applications can be used to copy your Active Backup for Business data and configurations from Synology NAS to other devices or the public cloud.

- **Snapshot Replication:** This option is recommended if you have access to a secondary Synology NAS. You can replicate your ABB data and settings to another Synology NAS and quickly restart all of your ABB tasks on that device.
- **Hyper Backup:** This option allows you to back up your ABB data and settings to other locations, such as portable drives, file servers, and public cloud storage. However, recovery requires you to first restore the backup to a functioning Synology NAS before relinking and restarting ABB tasks.

Relink

After creating a replication or backup task, it is important to make sure that you can successfully restore or relink your existing Active Backup for Business tasks and backup data, whether they exist on a secondary NAS, in public clouds, or other storage media.

For detailed instructions on how to back up and relink your Active Backup for Business data using **Snapshot Replication** and **Hyper Backup**, refer to the following tutorial:

- [How do I back up and relink Active Backup for Business data to a destination Synology NAS?](#)

Make sure that your Synology NAS has 64-bit processors, is running DSM 6.1.7 or above, is running Active Backup for Business 2.0.4 or above, and has the necessary packages installed.

See the **Environment** section in the tutorial for more details.

Learn more

Related articles

- [Frequently asked questions about Active Backup for Business](#)
- [How do I select a suitable NAS for running Active Backup for Business?](#)
- [How do I back up individual files/folders on Windows PC and File Server using Active Backup for Business?](#)
- [How to create backup tasks with compression or encryption settings for file servers](#)
- [How many devices can I back up concurrently with Active Backup for Business?](#)

Software specs

Refer to the Active Backup for Business [software specifications](#) to learn more about the package's features, components, and limitations.

Other resources

For more step-by-step tutorials and visual information, feel free to also check out [Synology's YouTube channel](#). There, you can find related videos by searching for "Active Backup for Business".

You can also find admin guides, brochures, technical specifications, user guides, white papers and more for Active Backup for Business in [Synology Documentation](#).