



Backing Up and Syncing NAS:

Hone Your Workflow With
the Right Applications



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Overview

Many growing businesses struggle to understand how to use their network attached storage (NAS) devices to support business operations. Some challenges include figuring out which application to use for backing up and when to back up instead of sync. Other problems might include understanding how to access files remotely, how to use a NAS to collaborate with a remote team, or how to set up the NAS to support workflows.

Not all companies will share the same pain points, but these are some common issues that can be solved by using the right application in combination with the correct function (backup or sync). Without the proper configuration, you could lose data or risk wasting time with inefficient practices. To successfully use your NAS and achieve your goals, you need to know the difference between backing up and syncing and which applications work best for your use case. In this white paper, we'll take a closer look at how you can use your NAS device to streamline your efforts and help you make the most of your NAS device.

Understanding NAS Capabilities

Companies often struggle with server space and scalability. Running out of storage could bring your business to a screeching halt. It's essential to have a solution that grows with you as your business expands and your needs change.

Moreover, experts recommend backing up to a separate, off-site and geographically distanced location to keep files safe and secure. You may also need an easy way to share your files to collaborate with teams and remote workers. A solid NAS solution, coupled with off-site cloud storage like Backblaze B2 Cloud Storage, could solve all these problems.

NAS Benefits

There are far-reaching benefits to using a NAS. Implementing a NAS into your network can greatly increase your storage capacity, offer you faster data access, enhance collaboration, and provide more protection and security—all wrapped up in a cost-effective package. Plus, a NAS device makes the perfect local backup storage container. And, best of all, their platforms make it easier than ever to get your data secured in cloud storage.

When choosing the best NAS device for your company, consider well-known options like QNAP and Synology, as well as other reliable devices like TrueNAS and Jellyfish. Many NAS solutions (including the four just mentioned) offer native integrations to cloud storage, making it easy to seamlessly back up your data or sync files as part of your workflows. That's a critical step because, as a local storage connected to your network, NAS devices are vulnerable to on-premises disasters and cyberattacks.

Comprehending the Difference Between Backup and Sync

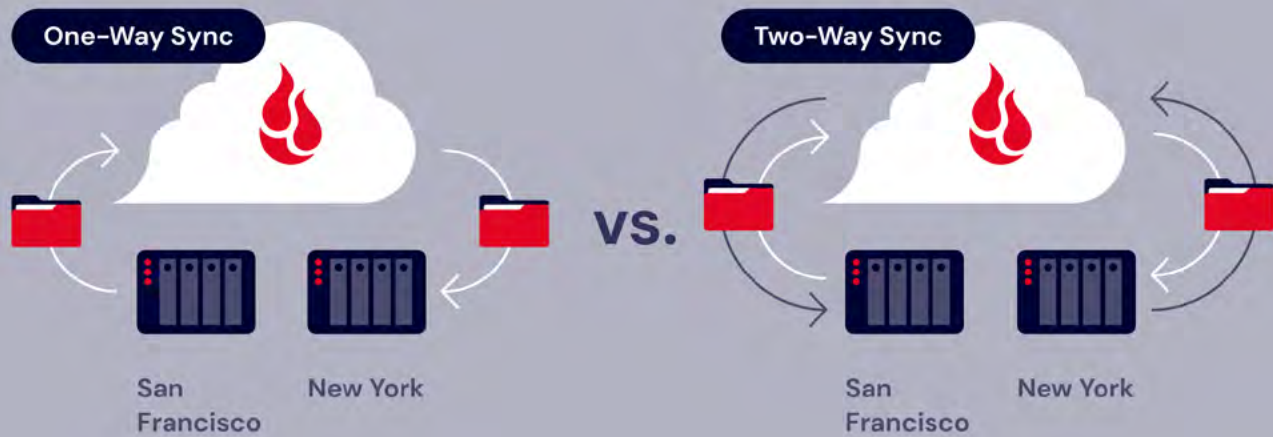
Although they sound similar, backing up and syncing are different processes. It's important to understand the difference in order to select the right function and device application for your use case.

Backup

Backing up refers to copying files and digital assets from a computer or server to another device or storage location to keep it safe. When you back up your NAS to the cloud, you perform a [full backup and then incremental backups](#) to upload any file changes that occurred since the full backup. Backups are broken into blocks ([block-level backup](#)), which not only allows for the creation of multiple versions of files but also makes incremental backups easier going forward. This is important because NAS backup tools may allow you to configure your retention period—how long you wish to keep previous versions of files. Backing up to the cloud protects you against disasters, ransomware, malware, and even accidental deletion or changes to critical files. Some businesses use a NAS as their local storage device and back up the same files to the cloud for redundant safety.

Sync

Synchronizing refers to harmonizing one or more things. There are two different methods of syncing: one-way and two-way. In a one-way sync, when files from Location A change, Location B is updated; however, if something changes in Location B, files in Location A will not be updated. In a two-way sync, regardless of where the files change, the other location will automatically update to mirror the other. Usually, this means the entire file will be re-uploaded.



That said, syncing is not a safeguard against losing files. For example, if anyone accidentally deletes a file, it could be gone forever unless you have it stored in a backup. Syncing does have its positives, though, one of which is that changes to your files occur within seconds. Another huge benefit is the ability to access your files from anywhere. Because sync makes a mirror copy of files, if you connect your NAS device to cloud storage like Backblaze B2, you can easily access and download your files from anywhere in the world, as well as from integrations such as Iconik, Cyberduck, or other favorite applications. Sync is an ideal solution for media and entertainment companies that need to keep files updated with working changes; however, it's not a great option for people purely looking for a disaster recovery option.

When working with a NAS device, you need to choose the correct application for your purpose—in some cases, that might mean backing up in tandem with syncing.

Ensuring Effective NAS Backup

Syncing has its place and is a good solution for certain circumstances such as copying files to a second location or having raw media files stored in a B2 Cloud Storage bucket. However, if your goal is to truly back up and secure your data, you need to select the proper application or software to accomplish the goal.

Backup experts recommend using a **3-2-1 backup strategy**. The 3-2-1 model includes three total copies of your data: two backed-up local copies stored on different media, and at least one copy stored off-site. Cloud storage is an excellent option for your third, off-site backup.

Furthermore, using cloud storage for your off-site backup helps prevent data loss due to ransomware, natural disasters, or hard drive failure. With your data in the cloud, you can access it 24/7, and it's fully secured with encryption. NAS devices like QNAP and Synology come with backup software that makes it easy to back up to the cloud, and cloud storage is scalable so it can grow with your business. You don't have to worry about upgrading hardware in order to keep your files backed up and safe. In fact, you could even free up storage space on your NAS by off-loading some of your data to the cloud.



Additional Integration Methods

Keep in mind that other integrations will be as effective as your device's installed applications, and they may have added value. For example, you could use your NAS device for local backup storage and then utilize backup software like Veeam to ensure additional protection for your data with encryption.

Although most NAS devices come with native integration software, there are other ways to copy your data from your NAS to the cloud, such as MSP360, Veeam, and SyncBackPro.

QNAP and Synology NAS Applications for Backup and Sync

QNAP and Synology, two of the most popular NAS devices on the market, each have their own application(s) to handle backup and sync functionality. A brief summary is provided in the following table.

Synology NAS		Hyper Backup	Cloud Sync
	<p>Backup data stored on your NAS as well as applications and system configurations.</p> <p>Back up to a variety of destinations including external drives and the public cloud.</p>	<p>Seamlessly connects to public and private cloud services.</p> <p>Offers one-way and two-way syncing.</p>	
	<p>Features</p> <ul style="list-style-type: none"> • Scheduling • Incremental Backups • Cross-File Deduplication • Multi-Versioning • Flexible Backup Rotation • Encryption and Compression 	<p>Features</p> <ul style="list-style-type: none"> • Encryption and Compression • Concurrent Processing • Admin Control Panel 	
QNAP NAS		Hybrid Backup Sync 3	
	<p>One app to back up, recover, and sync to/from local storage and cloud services.</p>		
	<p>Features</p> <ul style="list-style-type: none"> • Set Backup Schedules and Rules • Recover with a Web-Friendly GUI • QuDedup Deduplication Tool • Encryption and Compression • One-Way and Two-Way Syncing 		

Snapshot Feature

You may also notice a snapshot feature included with your NAS device. Snapshots can be used to make a copy of an application, disk, or system at any given moment in time. Snapshots are not ideal for 3-2-1 cloud storage backups. Although snapshots don't take up a lot of space and you can use them to quickly restore files, the data stays in the same physical location—invalidating the use of the 3-2-1 methodology. Also, because a snapshot captures a system at a single moment in time, it does not incrementally update like a true backup would.

Armed with a clearer understanding of your NAS setup and your backup/sync needs, it's time to start backing up your data to a public cloud, such as Backblaze B2 Cloud Storage.

How to Back Up Your NAS Data to B2 Cloud Storage

Most people find it easy and intuitive to set up their NAS for backups, but you can always refer to the Knowledge Base/Help articles for your specific NAS device manufacturer or cloud storage provider. You can also find some helpful videos on backing up Synology and QNAP devices to Backblaze B2 Cloud Storage on [YouTube](#). Both Synology and QNAP have integrated backup solutions.

You will find that it only takes a few short steps to set up your NAS to automatically backup to B2 Cloud Storage.

1. Create an [account](#) with Backblaze.
2. Using the B2 Cloud Storage dashboard, create an Application Key and key ID.
3. Create a bucket to store your data.
4. Using your backup app, enter the Application Key and keyID to connect with B2 Cloud Storage.
5. Select a bucket and choose the files you want to back up.
6. Configure a backup plan and start backing up.

Beyond Backing Up: Accessing Files on Your NAS Remotely

You don't have time to hunt for files located in multiple locations when you need information that will help you grow the company. You can use your NAS not only as a backup solution but also as a central hub for remotely accessing your files. There are a few ways you can set that up.

- **VPN:** A VPN offers an encrypted tunnel to access your NAS files remotely. VPNs are secure and mask your IP and online activities from cyber criminals.
- **Website:** You could also log onto the NAS by visiting a specific website and logging in with your chosen credentials. Depending on which application you use with your NAS, you may have the option of setting up access through a website or IP address.
- **QuickConnect:** Synology uses its own app called QuickConnect, in which you create an ID or name for your NAS, set up a hostname or IP address to access it, and map a port on your network to allow incoming and outgoing connections to securely access files.
- **QNAPCloud:** Using a QNAP NAS, you can register your device on the QNAPCloud, give it a name, set up a username/password combo, configure other settings, then log in from there. You may also have to set up DNS information with some of these solutions.
- **FTP:** You could use FTP to access your NAS files. Using your chosen FTP client, you can set up your NAS as a remote server and upload and download files. Typically, the interface is not graphical but list-based, but it's often a quick and easy way to grab files when you need them. Remember that FTP is not the most secure or elegant method of accessing your NAS remotely.

If you use your NAS for backups to cloud storage, you have another way to access your files remotely. You can simply log onto your cloud account and view, download, and use your files from the cloud storage platform. You can also use sync functions to access your files in the cloud with the most up-to-date changes regardless of where you are in the world.

Using Sync to Collaborate and Share Files on Your NAS

A growing company means more employees and more remote workers. COVID spurred on a global remote workforce that has continued for many businesses. The world working remotely helped perfect remote work technologies, and now teams from all over the world work together seamlessly as if they were in the same building.

When you run a small business and have employees in various locations, everyone's work connects, and each team member needs to stay up to date with the latest file changes to be efficient. The solution is to sync your files using your NAS.

Syncing ensures that everyone works on the same/correct file, not multiple versions. It also allows you to easily reduce network traffic and share large files, including media files.

You can do this using [Synology's Cloud Sync](#) or QNAP's HBS3 apps along with other syncing tools. Depending on your preferences, you could go with a one-way or two-way sync model. Synology's DriveSyncShare software can also keep multiple NAS devices in sync.

Syncing to the cloud rather than to another NAS device provides you with better protection and ensures that you miss nothing. As soon as files are changed or created, they are copied to the cloud. Plus, they are secured by military-grade encryption for an added layer of security.

Syncing allows you and your team to access the most current files available, but it's also critical to back up your data, ideally to the cloud. Backing up to cloud storage ensures you have all the copies you need, using versioning if you need to go back to a specific moment in time. With teams working from all over, the risk of cyberattacks is higher, and storing a safe backup in the cloud can help you recover quickly from any disaster. [Learn more](#) about collaborating using your NAS device and cloud storage.

Utilizing Your NAS Sync Function for an Operative Media Productions Workflow

Countless industries use NAS devices to help with data storage, but if you're in an industry creating a lot of content, utilizing a NAS device may boost your work efficiency, save you time and money, and clean up your storage issues.

Say you are filming a video in 4K. An average film could be as large as 100GB. That would take up a lot of space on your computer or server. Instead, you can use a NAS device and transfer the files from your computer/server to quickly free up necessary space.

NAS devices provide an enormous amount of storage (more than any single hard drive), which is critical in the video industry. A NAS also offers backups, security, and redundancy using data storage virtualization (e.g., RAID). Most NAS devices come fully equipped with software to integrate with many popular media applications, making it easy to [share your work with other team members or clients](#). Learn more about how to [use a NAS with your Media and Entertainment workflows](#).

Sync

With this use case, you can easily sync your most recent files to the cloud so everyone can review the same footage. Synology's Cloud Sync and QNAP's HBS3 do an excellent job handling this. You can install a NAS device at each location to disperse the workload and sync everything, so everyone has access to the same files no matter where they are located. You can choose between one-way or two-way sync. Syncing protects your video files by immediately copying them to the cloud as a backup option if anything happens to the files on the NAS. Later you can keep those versions as archives once you settle on the final video. Most video files will be too large to email, and we've found that FTP tools like Cyberduck and Transit are often your best bet for sharing files with clients. You can also easily browse files in the cloud using FTP or with your cloud storage provider's platform. For instance, Backblaze B2 Cloud Storage makes it easy to scan your files with our "Browse Files" page.

Backup

While most media customers will opt for syncing, you can also back up your NAS to the cloud to archive older files and keep them for versioning. Use QNAP's Hybrid Backup and Synology's Hyper Backup for this solution. Both apps will allow you to model your backup scenarios using the 3-2-1 format. Backing up your video data from your NAS to the cloud will give you enhanced data protection, better security, automation, and scalability. Using [QNAP](#), you have some options when backing up your media footage. You can choose between Snapshot and Hybrid Backup Sync (probably the best solution).

Conclusion

Whether you are syncing your NAS devices together or backing up your NAS to the cloud, you can rest assured that your workflows will improve and that you will save time, space, and money with the support of cloud storage to your on-premises device. Boasting ready-made integrations with NAS systems from Synology and QNAP, the ability to sync across locations and robust backup protections, Backblaze B2 Cloud Storage is an excellent solution regardless of which application you use for either function.

Backblaze B2 Cloud Storage easily integrates with NAS devices to protect your data for \$6/TB per month.

[Start Today](#)