

# Essential File Storage Practices

Losing important work or personal files can be a frustrating and costly experience. A solid backup and recovery plan is essential to prevent such occurrences. One solution that stands out is Network-Attached Storage (NAS), which offers numerous benefits for both home users and small businesses.

## True Backup Solutions

While cloud solutions, like [Microsoft OneDrive](#) and [Google Drive](#), provide basic file redundancy and convenience, they are primarily sync tools and not true backup solutions. A more robust approach is to adopt a two-prong strategy by storing files locally and in the cloud for comprehensive data protection.

Consider adopting a two prong approach by storing files locally and in the cloud.

- **Local:** Synology NAS or QNAP NAS devices are ideal options for backing up software.
- **Cloud:** Microsoft OneDrive and SharePoint are ideal for storing files and collaboration.

## Benefits for Home Users

A NAS offers several key benefits for home users.

- **Centralized Storage** which allow home users to storage all your files, photographs, videos, and music in one centralized location, accessible from any devices.
- **Automatic Backups** ensures that your backups on your devices to protect against data loss.
- **Media Streaming** apps, like Plex, Kodi, or Emby, can be useful in streaming movies and music directly from your NAS.
- **Remote Access** allows home users to access files from anywhere via the internet.

## Benefits for Small Businesses

- **File Sharing & Collaboration** feature can enable employees to share and collaborate on files easily within the network.
- **Data Redundancy** is essential in reducing the risk of data loss from drive failures by protecting data with RAID configurations.
- **Data Security** is enhanced via advanced access controls and encryption help protect sensitive business data.
- **Backup & Disaster Recovery:** A NAS can function as a backup center, safeguarding essential data against ransomware threats and accidental loss.
- **Private Cloud Solution:** Eliminate cloud storage subscription fees while retaining full control of your data.
- **Surveillance Storage:** Efficiently store security camera footage, with certain NAS devices offering direct integration with IP cameras.
- **Virtual Machine & Docker Support:** Many modern NAS devices support running virtual machines, Docker containers, and even hosting small business applications.

## Network Attached Storage Options

[Synology](#) and [QNAP](#) are popular because they offer high-quality, reliable Network Attached Storage (NAS) devices with user-friendly operating systems and robust features. The benefits of a network attached storage (NAS) include local control of your data, higher performance in accessing data, enhanced security, and cost-effectiveness due to a one-time purchase for hardware with no recurring subscription fees.

[Synology NAS Selector](#) and [QNAP NAS Selector](#) assist potential home, small office, and enterprise users to determine the best option for their use-case scenario.

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## Top Cloud File Storage Software

Here are a few of the more popular cloud file storage software. Each service has its unique strengths. The best choice varies depending on your specific needs and priorities.

- [Microsoft OneDrive](#)
- [Box](#)
- [Google Drive](#)
- [Dropbox](#)

Advantages of cloud file storage lies within its accessibility from anywhere with an internet connection, data redundancy, and backup options. Scalability is a key feature in which it is easy to increase storage capacity. An added feature of cloud file storage is seen in its sharing and collaboration.

## Final Thoughts

Ultimately, it is your responsibility to safeguard your files by performing regular backups or ensuring their storage in a location with automated backup capabilities, such as network drives or cloud platforms. Encrypted USB thumb drives are also a good option for additional backup.

A general rule of thumb for backups is the **3-2-1 rule**.

- Ensure to make three (3) copies of your data with one primary copy and at least two (2) backups.
- Consider using different types of storage mediums, such as an external hard drive, network-attached storage (NAS), and cloud storage to reduce the risk of simultaneous failure.
- Keep one (1) backup off-site, such as a NAS or cloud service, located in a separate physical location, to protect against local disasters.

This approach ensures redundancy and minimizes the risk of losing your data permanently.