

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.