

## How to choose a cloud storage and backup provider

Each organisation requires a different approach to storing data in the cloud



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You are thinking about moving or backing up data to the cloud. Maybe your team cannot easily collaborate on shared files and synchronize between workspaces, or you need a disaster recovery plan and know you should keep offsite backups.

Maybe your operations routinely generate so much data that your infrastructure growth appears unsustainable. In short you have data challenges and you suspect that you can address them by moving data to the cloud.

Choosing the right provider can seem daunting, but you can choose with more confidence by asking the right questions when researching your options.

- [Best cloud storage](#) of 2019 online: free, paid and business options
  - We also compiled the list of [best cloud backup](#) services
  - It is advisable that you keep a local copy of your files, so check out our [best NAS](#)
- Before evaluating cloud storage providers here are some key questions to keep in view throughout:
- What problems do you hope to solve by using a cloud provider?
  - Where a cloud solution seems the better option, as it often is, what would be the alternative? Can you compare and estimate the benefit of choosing one over the other?
  - Are you ready to adopt that solution not just technically but culturally? Can you imagine your organization using the solution consistently or might many users stick to prevailing methods of storing their data?

## Cloud Storage or backup?

You may think you need cloud storage when you need backup or vice versa. When “cloud storage” and “cloud backup” may seem interchangeable it is important to recognize that they are different. The purpose of cloud storage is to supplement your local and network storage and increase productivity while backup is for data recovery. Having files in cloud storage may enable you to consider them safe from the common risks of data loss, but that safety is ensured by the fact that major cloud storage providers themselves maintain backups of your data.

The kinds of questions you would ask when you need a cloud storage solution might be:

- Are our team members increasingly mobile and working from multiple environments?
- How easily can they collaborate on and share documents?
- Do we have large stores of accumulating transactional data and growing archives with creeping operational costs?

The kinds of questions you would ask when you need a cloud backup solution might be:

- What happens when a workstation, laptop, or server drive fails?
- How long should we retain database backups?
- If we take down a VM do we archive it?

## Consider the fit

After recognizing whether you need a cloud storage solution, backup, or both and how it will address your needs, compare your options by comparing how well they fit not only your immediate data requirements but also other business and technical requirements.

**Security:** Pay close attention to the security options available for stored data when it is “at rest” and in transmission. It is common for storage and backup services to apply AES encryption to stored data and TLS in transmission. These protections ensure that your data is not readable by the cloud service or by anyone intercepting data sent from you to the service. Depending on the sensitivity of your data you may desire more control and stronger protection. In those cases look for a service that allows you to manage encryption keys and apply different encryption methods as necessary.

**Compliance:** If you work in an industry with rigorous regulatory and compliance rules such as in healthcare you may think that storing data in a cloud service is more trouble than it is worth to fulfill those requirements. The major cloud storage and backup services have made accommodations for such requirements, such as in the HIPAA case where providers will sign a BAA and adhere to data and physical data center security as well as location requirements. When in doubt do an explicit search in your favorite search engine for the cloud provider and regulation in question.

**Access for all Clients:** Evaluate how users will access the cloud service and whether it provides clients for the appropriate devices and operating systems. If it is a web client does it work on mobile? Android and iOS? If it is a desktop client do you need it to be available on Windows, Mac, and Linux?

**User Setup Expectations:** Particularly when you are evaluating a cloud backup service consider whether you will ask your users to install a client and configure it themselves or whether you will automate that configuration. How easy must the client be to configure? If configured automatically can the client configuration be restricted to administrators?

In the case of cloud storage some services may use a “Sync” folder where the files stored on the cloud are also on a user’s local disk. Must each user setup and manage the location of their own synchronized folders?

**Ease of Transition:** Start with a high level vision for how you will transition to use the cloud storage or backup provider. In the storage case, will you migrate existing data? If you plan on moving many TB of data look into whether the provider allows for “offline” passing of data back and forth via delivery and receipt of hard disks.

**Support:** Support can vary significantly between services. What may seem like the right cloud service for you and your organization in terms of features may be lacking in the support you need. What support levels are available for the service? Can you escalate issues and if so what is the cost?

Consider the cost

Cost considerations literally affect the bottom line, and you may be tempted to compare cost above considering fit. If a cloud storage solution is indeed right fit, improves the productivity of your team, and reduces strain on infrastructure you will be in a better position to calculate the total cost of ownership for those cloud resources and compare them to the cost of the status quo. That includes the cost of new storage volume acquisition and maintenance as well as the effect of a potentially inefficient file sharing and collaboration approach.

Cloud storage and backup pricing follows one of two models: by user or by usage. When priced per user per month each user will receive access to some volume of available storage. Some backup services do not have data limits while others do. Cloud storage services will less likely have plans without data limits but there are exceptions. The major cloud service providers price storage by volume, adjusted by storage classes such as “hot” vs “cold” storage, and download requests.

The final cost to consider is the cost of migrating your data to the cloud provider. After you have chosen a provider and planned for its adoption you will need to decide its place within your current processes, how users will interact with it, and what data will live there. Migrating data and adjusting to a new process will take time and will require some investment.

Consider the benefits

You may not consider all features of a cloud storage or backup solution when comparing it to your needs. There are some useful features you may want to keep in mind when making your choice that may be lesser in priority but relevant.

For cloud backup:

- File retention policy. How long are deleted files retained in the backup before they are no longer available to be restored?
- How frequently do backups occur? Is it continuous?
- Can you restore individual files and folders on an ad hoc basis?
- Does the backup support versioning?
- What is the SLA for the backup service? Is there any ground for concern that your backup may be unavailable when you need it?
- Is multi-region backup available?

- Does the backup client support multiple cloud services?  
It is a great benefit to have an offsite backup for disaster recovery but the more resilient and fine grained the backup the better equipped you will be to handle the unforeseen.

For cloud storage:

- Can files be shared with anonymous users?
- What kind of access controls are available for individual users and groups?
- Can files be versioned?
- What is the SLA for the storage service?
- Can files be stored in multiple regions?
- What integrations does the service provide? E.g. with Office 365 or Google Docs
- Is the cloud storage provider part of a larger cloud service? Can the opportunity for storage broaden to other use cases as with databases or VM images?

Commit to adoption

The final consideration for choosing a cloud storage or backup provider is the ease of adoption and the possibility of committing to it. How easy the path to adoption is for your organization will likely not involve technical reasons. Convincing others that you have made the right choice for your team or organization can be just as important as making the right technical choice. There is no single method to gain buy-in but as adoption is essential to the success of your project, when you research options imagine how easy or not adoption may be.

It will be easier to gain buy-in if you can commit to your choice, and commitment to a solution will be easier if it fits into a larger ecosystem of applications and services that are consistent with a longer term vision. That may be in the context of a productivity suite you are using or integrating other operations with a family of cloud native services. When possible try not think of services in the cloud in isolation. Even if a chosen provider is not the perfect fit, if it enjoys wide adoption, solves your primary problems, and aligns with your organization's culture and vision it will be the right choice.

Not all cloud storage or backup providers are equal and there is no perfect choice. Examine your needs and readiness, consider fit, cost, benefits, and the path to adoption and commitment. Research cloud storage options with all of these considerations in mind and you will choose the right provider for you.

*Brian Jenkins, Solution Architect at [DataArt](#)*

Original article can be found here:

<https://www.techradar.com/uk/news/how-to-choose-a-cloud-storage-and-backup-provider>