

Types of Storage

BasS/ MBaS:

- Back end as a service is a viable way to keep, track, and store data. One essentially pays a service for the ability to run their back end. This usually includes analytics and other tools that help a developer. The main benefit of a BaaS is its ability to provide cross platform functionality to any application. Its also beneficial because as a customer, you have to worry about very little. Your data is handled by the back end and you can modify as you please with a user portal.

SQL Servers:

- SQL servers have been around since the 70's and are a tried and true method of storing data. SQL language has been around for a while and is well known. Not to mention it's easy to learn. Relational databases are also capable of handling large amounts of data in a single query. The SQL language allows the user to tailor their queries to encompass almost all the information they need. Though the pros can be enticing, relational databases do have their down sides. They tend to predefine their data, which makes the extremely rigid. SQL also does not use a hierarchical method to store data. This means a DBA might have to use extra steps when adding additional data. Another down side to relational databases its inability to convert and store custom data types from programming languages. SQL servers can be used to store log in information as well as any other user preferences within an application.

NoSQL Servers:

- non-relational databases are typically built for specific data models and can be extremely flexible and scale horizontally. Non-relational databases can use a variety of data models including graph, document and key-value. The pros to using a non-relational data base include its flexible schemas, which allow for faster and more hands on development. They are also have high performance. Since they are often built for a specific data model they can access and distinguish that data at an increased speed. Some disadvantages of non-relational databases usually stem from its relative age. Many non-relative databases have less support and are less mature than some of the older relational databases put out by major corporations. They can be used to store data for an application in a similar manner to SQL servers.

The Cloud:

- Storing data off the cloud has numerous advantages. One such advantage enhanced mobility. No matter where the user or the developer is, the data is always accessible with an internet connection. Cloud storage also provides easy back up and file recovery. Often times a developer can maintain the same file structure as well, making it easy to transfer hard disk data from a device to a cloud storage method. Speaking of physical devices, moving the cloud frees up real estate space as well as cut down on hardware upkeep cost. Utilizing paid cloud storage through a third party might also have its advantages. A company that specializes in cloud storage is Tresorit. This company provides many if its own services such as custom branding,

added security, central admin control and the ability to monitor device and user statistics.

File System:

- Storing data through a file system is also an effective way for developers to save data. Opening files are easy and supported by nearly every language. File systems also have a lot of tools they can use. Tools such as transfer options, backup, and revision control. This is also cost effective since many of the tools are free. File systems have also stood the test of time. Someone using a third party database might lose their data if that database was ever shut down for any reason. File systems provide an easy to track data as well as migrate it from place to place if the need arises.

Physical storage:

Thumb drives / Hard disk:

- Though outdated, a developer can still find a few benefits to physical storage devices. A developer could easily work on and save documents offline. And as long as they were sure their device was clean of viruses they would not have to worry about their data being compromised. Another perk would be that the initial cost of small time storage would be relatively cheap, and backing up data to that device would be pretty easy. A major down side to physical storage is its ability to get lost. If a developer was backing up their data on to portable hard disk, and if those hard drives ever got lost, then the data would be lost too. And though the developer wouldn't have to worry about web based threats, their data could be compromised if they lost their storage device and it was picked up by the wrong person.

Resources

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