Dylan Anderson

IT201

11950

What is Cloud Storage?

Cloud storage is backup storage usually manned by third parties providers on remote software instead of dedicated databases on site. Cloud storage provides many distinct advantages over in house storage, such as elasticity (product demand), scalability (capacity to change), multi-tenancy (shared environment), and metered resources (unlimited). I'd like to delve into every advantage on their own.

Elastic Capacity and Scalability

Elastic capacity is defined as an economic concept used to measure the change of behaviour of buyers and sellers in response to a change in price for a good or service (Hayes,2021). Cloud storage is highly elastic due to their availability but not necessity. So as the price of cloud storage decreases, demand will increase, as time has shown lately. Cloud storage also can be

theoretically infinitely scaled upwards due to no requirements of dedicated servers on sites.

Multi-Tenancy and Metered Resources

Multi-tenancy in cloud storage means multiple sets of data from multiple user groups can stay in one interface (Red Hat, 2021). This means data from McDonalds and Burger King could be on the same server. This does not mean that McDonald's data can be accessed by anyone in the server, as all of it is encrypted, however they still share the same server. Multi-tenancy is used as a cost effective tool for cloud providers, as the data can be stored in the same server, requiring less servers to run. The amount of data stored on these servers reflects on how much the company pays. This is known as metered resources. The amount of data is linked to how much the company pays, which is basically unlimited.

How is Cloud Storage Used?

Cloud storage is used by creating multiple backups of data on different host servers across the Earth. Cloud storage is mainly used as a backup for in

house data. This is why data is held on many different host servers, in case one of them fails. Cloud storage has four types, personal, public, private and hybrid. Personal storage is mainly used for home computers and devices holding pictures or other data for personal use. Private storage refers to cloud storage held in house for a specific company where they hold all the data available and can use it as they please, good for companies who worry about security issues. Public storage is available from a third-party provider as a service, good among enterprises. Hybrid storage is a combination of private and personal storage, used as a balance and cost effective means of storage for enterprises.

Cloud Storage vs Cloud Computing

Cloud storage as defined early should not be confused with cloud computing. Cloud storage is used as a backup, whereas cloud computing uses computing power and availability as a service (Microsoft, 2021). Cloud computing refers to virtual machines or desktops.

Pros of Cloud Storage

The pros of Cloud storage are due to its backup nature and the type of storage being used. Cloud being a backup storage has built in disaster and fault protection through many different server hosts across a country. Cloud storage has infinite storage and is defined by the elasticity of the services provided. Cloud storage is cost effective if managed correctly, as improper use of cloud can end up detrimental to a business instead of helping it. Private clouds are dedicated and can be managed and controlled as seen fit by the company. Public clouds provide free updates without the cost needed for a company. Public storage also has built in resilience to natural disasters as the data is replicated. Hybrid cloud if used correctly can have both pros of private and public cloud without the cons.

Cons of Cloud Storage

The cons of cloud storage deal with the type of storage used. Private cloud storage is only updated by the company owning it, which is itself another cost to upkeep. Private cloud storage also may be destroyed by a natural disaster if not properly divided. Public storage is maintained by a third party, and is shared by a multitude of different users. It is debatable if the security

of a public storage is worse than a private cloud but it is more prone to attacks.

Conclusion

Cloud storage is backup storage usually manned by third parties providers on remote software instead of dedicated databases on site. Cloud storage in its four types provides many different ways to be implemented into a business. It should be known that cloud storage is only as efficient and cost-effective as it is managed and can be detrimental if used incorrectly. There is no right way to implement cloud storage, however doing it the best fitting towards your company leads to better results and a better business in the modern era.

References

Hayes, A. (2021, September 13). *Learn about elasticity*. Investopedia. Retrieved September 20, 2021, from https://www.investopedia.com/terms/e/elasticity.asp.

What is cloud computing? A beginner's guide: Microsoft azure. What Is Cloud Computing? A Beginner's Guide | Microsoft Azure. (n.d.). Retrieved September 20, 2021, from https://azure.microsoft.com/en-us/overview/what-is-cloud-computing/.