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CHOOSING THE RIGHT CLOUD STORAGE

Netmagic SimpliCloud offers a range of web-scale storage options on cloud for enterprises and developers. This [Technology Paper](#) outlines the core characteristics of the entire storage offering on SimpliCloud and how they are different from each other

OVERVIEW

Netmagic [SimpliCloud](#) offers a range of web-scale storage options on cloud for enterprises and developers. This page outlines the core characteristics of the entire storage offering on SimpliCloud and how they are different from each other. There are 3 types of storage options available on SimpliCloud:

- NAS Storage ([SimpliNAS](#))
- SAN Storage ([SimpliSAN](#))
- Object storage ([SimpliDrive](#))

The selection of right storage for you would depend upon factors like expected workloads which you intend to move to SimpliStor. Each storage option within SimpliStor varies in terms of performance, access and durability. This page also exemplifies some of the use cases based on which you can conclude whether a stand-alone storage would suffice or you need to combine the available storage options to create a more agile and comprehensive storage fabric for your virtual IT infrastructure on SimpliCloud.

You can make use of Netmagic SimpliSAN to separate out storage from the virtual machines. This storage would act like an external hard-disc to your computer. Since the external hard-disc is attached as a physical device, the end-user is responsible for creating partitions and formatting the attached disk device. You can place any kind of file system on SAN storage. The SAN storage can only be attached to one server at a time, so SAN storage cannot be used to share data across virtual machine instances concurrently. You can attach the SAN to a particular virtual machine as long as required and then re-attach to other VMs as may be required.

You can also make use of Netmagic SimpliNAS to separate out storage from the virtual machines. NAS is also termed as file storage. With NAS, files are exposed through a distributed file system protocol (NFS/CIFS). With SAN, you need to create a volume, deploy an OS/File system, and then attach to the created volume; with NAS, the storage device handles the files and folders on the device. NAS allows multiple server access through a file-based protocol (NFS/CIFS). This allows administrators to implement simple and low cost load-balancing and fault-tolerant systems.

With Netmagic [SimpliDrive](#) (object storage), files are exposed through an HTTP interface, typically with a REST API. All client data access is done at the user level: the operating system is unaware of the presence of the remote storage system. Users access and modify files by making HTTP requests. SimpliDrive doesn't provide access to raw blocks of data. It doesn't offer file-based access. Object storage provides access to whole objects, or blobs of data and generally does so with an API specific to that system or SimpliDrive portal.

Your business may require you to have a long-term archival of data in highly durable and redundant fashion. For such storage requirements, you can make use of Netmagic SimpliDrive. Object storage can be accessed via https REST API or SimpliDrive portal; multiple users can download a single object at any given point of time.

The following table summarizes the various types of cloud storage available with Netmagic:

Point of Comparison	SimpliNAS	SimpliSAN	SimpliDrive
High level description	File Storage	Block Storage	Object Storage
Access protocols	NFS/CIFS	SCSI	Secure API's
Data persistence	Persistent data unless deleted explicitly.	Persistent data unless deleted explicitly	Persistent data unless deleted explicitly
Data durability	Highly Available (RAID 5 default)	Highly available (RAID 5 default)	Extremely durable data. 3 copies of every object are maintained across 3 physically dispersed storage nodes in an availability zone.
Ideal for	Active data. Like a database catering to requests coming from web or app layer.		Static content or backup via internet over https.
Not ideal for		Sole method of backup for mission-critical data	Active data like video streaming or databases.

Typical Use Cases for SimpliNAS

- Applications requiring frequent read / write access (such as web apps)
- Temporary storage repository for content that is constantly changing (e.g. buffers, log files, etc.)
- Corporate e-mail system with multiple, load-balanced webmail servers
- Load-balanced web servers access the same contents from NAS storage

Typical Use Cases for SimpliSAN

- Workloads requiring long-term data persistence
- Situations wherein data changes frequently (read / write access)
- High performance storage for a database or I/O intensive applications or a file system
- Applications that need detailed updates with access to block-level storage

Typical Use Cases for SimpliDrive

- Data storage archival and backup where data is required to be highly durable and massively scalable
- File sharing and quick accessibility over the internet around the globe
- Storing static web content like image store, music store, flv object, etc.
- Websites hosting large user-generated data (e.g. a student admission portal where students upload their mark sheets, photo ID proof, etc.)
- Large scale transaction based computing implementations

COST PERSPECTIVE

- Virtual NAS and SAN comes in min. increments of 100 GB and at attractive price point which can incline your commercial model towards hosted storage than a dedicated storage due to pay-as-you-grow model
- Object Storage or SimpliDrive is charged on the amount of GBs that you want consume + network consumption and request prices. The object storage is extremely cost effective i.e. the total cost per GB of object storage is lesser than a SAN or a NAS, that too with 3x redundancy and high durability

MORE INFORMATION

Cloud Service details, SLA and Prices	Click Here
SimpliNAS and SAN	Click Here
SimpliDrive	Click Here

For any queries / assistance, call us on **1800 103 3130** or email us at marketing@netmagicsolutions.com