

Comparing Synology NAS and Cloud storage from Google, Amazon, and Dropbox By Fragkos Maragkou – Solutions Architect

Synology is a NAS (NETWORK ATTACHED STORAGE) company, that gives you the opportunity to have your data, files, and sensitive information, physically stored in your office, house etc. Nowadays, there is a lot of competition for companies specializing on NAS devices, mainly by the cloud storage providers. Both of the solutions have their advantages and disadvantages, and there are many factors involved to decide the best solution for your company.

Synology NAS

Let's take for example two of the entry level and best sellers from Synology, the DS220j and DS420j. They have two and four bays respectively. They can hold up to 64TB of internal storage with the DS220j in RAID1 and the DS420j in RAID5. The power consumption is very low and generally require zero maintenance. They are one of the devices that you buy once, set them up as a file storage and forget about them, unless an extreme scenario occurs, i.e., fire on premises, or technical related issue. Below you can see a price comparison chart to Google Drive, Amazon Storage and Dropbox. All prices are in USD dollars and do not include electricity bills for the NAS, since they are different for each country.

TYPE	Price per month over 5 years		
	1TB	10TB	20TB
SYNOLOGY DS220J	\$0.0048 per GB	\$0.0015 per GB	\$0.0007 per GB
SYNOLOGY DS420J	\$0.0048 per GB	\$0.0015 per GB	\$0.0009 per GB
GOOGLE DRIVE	\$0.0083 per GB	\$0.010 per GB	\$0.010 per GB
AMAZON STORAGE	\$0.0050 per GB	\$0.0050 per GB	\$0.0050 per GB
DROPBOX	\$0.0041 per GB	\$0.0041 per GB	\$0.0041 per GB

Google Drive

Google Drive is rather nice, it gives you the opportunity to split your storage between your Photos and Drive, but it is costly.

Amazon Storage

Amazon Drive has a fixed amount per GB per month, it does not matter on capacity.

Dropbox

Dropbox only offers one plan, and it goes up in increments of 1TB.

As it can be seen from the chart above in the long run, over a period of 5 years Synology/NAS is considerably cheaper to run for the larger amounts of data storage. For smaller amounts of data, Cloud can also be considered as a good option, due to the simplicity of implementation as well as the similarities on price.

NAS PROS AND CONS

A NAS device can be stored in a room of your office/house and it will act as a file storage server. A few of the **PROS** of a NAS are that is cheaper to in the long-term. There is no

monthly fee, you only have the initial investment. You can have access anytime to your data physically if required. You can customize it to a great extent. It is also faster to work with since it will be on the same network and there is no internet required unless you want to work remotely. On the other hand, a few of the **CONS** are that it is not as easy to experiment with it and you might need a specialist to do the initial setup. The initial investment can be costly.

CLOUD STORAGE PROS AND CONS

The Cloud storage in general, regardless the provider, has also a few advantages and disadvantages. A few of the **PROS** are, that is super easy to register and setup your account to begin with. Also, another advantage is that there is no initial investment required since the monthly payment starts as soon as you register. A few of the **CONS** are that, in the long run it can be costly especially if there is a large amount of data. The security of your files relies on another party, and not entirely on yourself. You will have no physical access to the data if you require to. Also, if your payments get declined or for some reason you forget to pay on time, there is no guarantee that your data will be kept safe.