

How to Build a (Simple) Cost Efficient Storage for Media

Content storage is essential in a media workflow, *writes François Pascal*. The fast-paced world of content production result in huge volumes which need to be securely stored. BCE (Broadcasting Center Europe) answers the needs of its customers with a secure and high volume compliant solution...

The Jungle

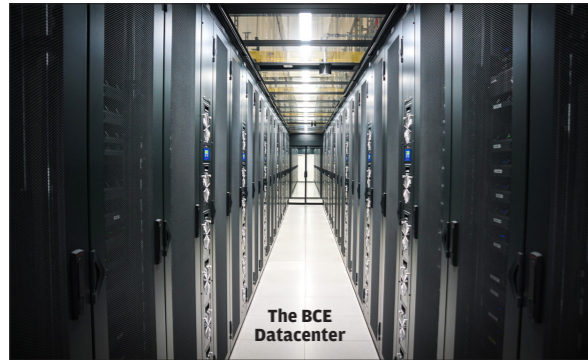
The market is overwhelmed with storage offers. While they all present their services as a real solution for data storage, the costs scheme can be quite complex to understand with solutions which would result, for the media world, in a very expensive way to store content.

Moreover those providers present their services for any kind of content, whereas it is audio files, video files, metadata, office files, databases etc., the costs can vary from one type of content to another, with no real logic, since all content is data.

Some providers are charging on volume, but also on the traffic generated. A price simulator is generally provided, but the complexity of the results confirms the difficulty to validate an offer. With the high volumes generated by video data, a simple moving of files from one cloud storage to another can result in unbearable and inexplicable costs.

"Before selecting our storage solution, some of our customers had experienced complex situations. I remember this producer which had uploaded on a cloud storage a full season of series and decided to reorganise the files on different accounts. Since he had a traffic-based offer, the customer was charged an amount for the upload of the content and the same amount again for moving the files," explains Jean-Alain Jachiet, CIO at BCE. "With the files size the media world is dealing with, these offers are clearly not adapted to producers and content providers."

Working on a daily basis with producers and content providers, such as Fremantle, RTL or EndemolShine France, BCE understands perfectly the needs of the media market. To do so BCE designed an offer focusing on five important points namely: redundancy, access, volumes, GDPR and of course a realistic, yet easy to understand price.



Answering the media market

Content is king and, as a result, is highly valuable, our customer asked us for a solution which would ensure the safe storage of content. To do so BCE integrated redundancy in its workflow, giving the possibility to its customers to benefit from content mirroring on two separate storage sites if they have this business needs.

Connected via dark fibres the two BCE datacenters feature real-time redundancy with 24x7 monitoring and regular failover tests to ensure both sites resiliency.

"Production companies need to secure their daily rushes before post-production. Usually, there is only one copy per day of shooting, which is then stored in one or even multiple low cost NAS," underlines Majda Fahim, Sales Officer at BCE. "Knowing that most NAS storage solutions integrate feature backup over the cloud via S3, it is possible for all our customers to be directly connected to our storage solution with a transparent transfer of data from their local site to BCE cloud."

The S3 (Simple Storage System) is interesting because of its consistent performance, even in case of a non-ideal situations of high latency or limited internet bandwidth.

A S3 backup agent can be installed on any Linux or Microsoft servers to perform backup over the cloud directly to the S3 system. An S3 solution combined to BCE cloud storage solution can save any organisation in case of incident at their premises, such as natural disasters, fire, or even cyber-attacks. BCE experts are

of course available to advise its customers in the selection of the most appropriate S3 solution as well as its configuration.

In addition to this automated S3 backup, our customers can access their content whenever they want, with unlimited actions (download, upload, put, get, list, and so on). When working

with large files and especially with rushes, it is important to have the possibility to access them immediately, screen the video files and be able to classify these.

The media world deals with some of the highest file sizes, unfortunately the server-only solutions available on the market do not always answer the reality of our activities. To be able to answer to the needs of our customers, our cloud storage solution is linked to our 22 Petabyte digital library with room for upgrade, giving an almost unlimited storage capacity for our customers.

If your company oversees its cybersecurity through a Security Operation Center (SOC), the logs of all your machines need to be centralised to a Security Information and Event Management (SIEM) server. The volume of logs for medium organisation can easily reach millions of lines per day. Having a repository in S3 can lower the cost of storage, but also protect the data in case of future security research.

"Our customers are concerned about the location of their files in the cloud. While a cloud storage offer can be attractive, there is no clear information on where the content is going to be stored," comments Jean-Alain Jachiet. "While most European datacenters have strict security measures, other sites based in overseas markets do not always meet the security levels needed by the industry."

To avoid multiple carriers and to keep the control over the storage infrastructure and security, BCE

took the decision to centralise all its infrastructure in Luxembourg.

Meeting the GDPR guidelines, our customers have full control on their content with a clear view on the file's location.

With a monthly flat rate at €9.5 per TB, BCE grants its customers unlimited actions on their cloud storage. For more transparency, the cloud storage costs are not based on data traffic but on the number of TB storage space used in one or two datacenters for redundancy purpose.

Room for improvement

A classical S3 environment limits one single user having all rights. There is no possibility of creating different user access levels with read only or write rights. Such functionalities are only available if you install in front of the S3 storage a server able to control these accesses and authorising different users and to mount the S3 storage like a classical file system.

For those having legal requirement to store data during long period of time, typically 10 years for financial data, backup from S3 to tape are now integrated by vendors. The only recommendation is to make sure that the software used for the backup to tape in not proprietary forcing you to stay with your S3 provider. Now, it is common to perform backup on tape with classical formats like TAR.GZ or LTFS. In case of dispute or if you want to select another vendor, with such format of backup, you can take away your tapes and read them with any basic backup/restore software.

With the multiplication of video content, it is paramount for media companies to secure their data in redundant and secured environments. At €9.5 per month per TB, BCE answers the market with a cloud storage solution which meets the needs of its customers at a realistic price. Storage must stay a part of the media workflow and BCE is looking forward to offer to its customers

a future-proof solution. ■



FLAT RATE. NO SURPRISE.
S3 COMPATIBLE. GDPR COMPLIANT. SECURE.

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