How a University Manages PB of Data for their Research Programs

Their Situation

Researchers store their Files & Data using "CEPH Object Storage" and Tapes.
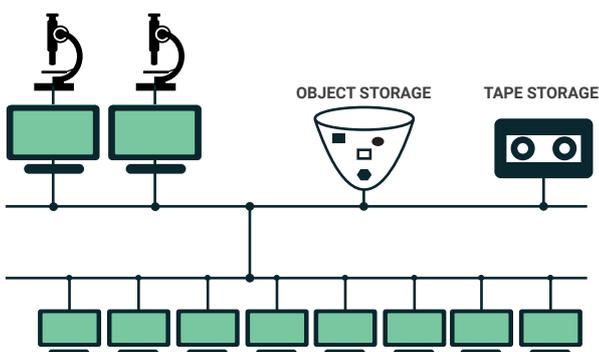
Goals and Wants

• Have 2.2 PB on their existing "Object Storage"

• Link directly to their 12 PB storage on LTFS Tapes.

• Access every Data (2.2 PB +12 PB) easy and fast.

• Have a "Live Archive" environment but with restricted access.

• Keep the Costs down.

Challenges and Obstacles

• Need of extra hardware to link Object Storage to Tapes. This complexifies their workflow and it requires IT people to help researchers.

• They use heavy customized Applications and Software to move Files from Disks to Tapes and back.

• File movement is "Semi-automated" and requires work and many controls.

• To be able to "Ingest" up to 75 TB of Data / day.

• Ceph is a cheap software in CAPEX but is expensive in OPEX as several skilled people are needed to run it, adapt it and maintain it on daily base.

Problems they need to solve

• Like many other companies, they realize that connecting Object Storage and LTFS tapes, is now a very valid decision for their own environment. This is a decision they made and they want to have an easy "ready to use" solution.

• Their Researchers need to see and access all their files whatever the storage platform (Disks and Tapes).

• Today, they keep the traceability with the Object Storage but lose it once the file in on Tapes. They want to keep the traceability on tapes too.

• Their legacy backup software doesn't allow them to retrieve one file without all the backup files which makes it heavy and cumbersome.

OBJECT STORAGE   TAPE STORAGE

Their Ideal Solution

1. A "Ready-to-use" Software, easy to run and maintain, so it keeps the IT costs down both in CAPEX and OPEX.

2. With all the right APIs to connect any of their existing hardware (Object Storage and Tape Library - and the future ones) in one "Single and Unified" environment.

3. Managing Data Workflow from Data ingestion to Data Archiving in a full automated, semi-automated or even manual way if needed.

4. Data should always be accessible, reachable and real time traceable.

5. Manage the File/Data and its metadata one per one for easy access by researchers.

IF YOU WANT TO CONNECT OBJECT STORAGE (CEPH INCLUDED) WITH ANY OTHER PLATFORM OR HAVE PRECISE QUESTIONS TO BE ANSWERED...

GET A FREE CALL WITH OUR SENIOR TECHNICIAN NOW BY FOLLOWING THIS LINK.

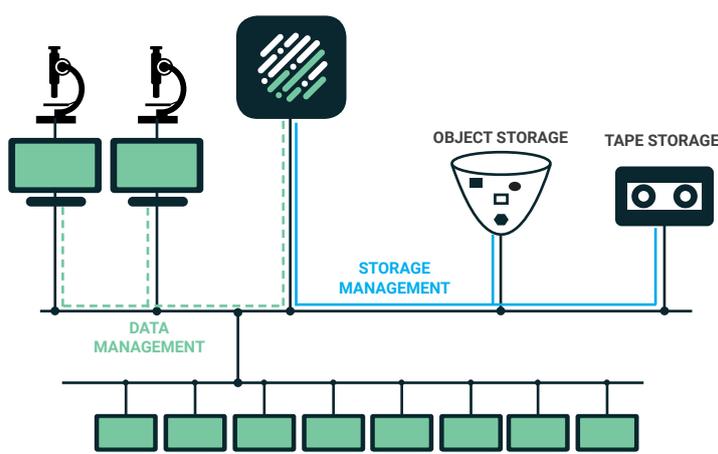## How Nodeum helps them to solve their problem ?

It is a Data Management software fully compatible with Object Storage Files (CEPH included) in and LTFS Tapes. In less than one hour, Nodeum is installed and connected to the platforms. It has all the right API's to create 1 unified environment.

They are free to "Automate or semi-automate" their workflows (or not !) from Ingestion to Archive. The solution doesn't requires Capex and to run it or maintain requires only a few hours per week.

Beside their existing "Research Library", Nodeum provides automatically a Catalog of all their files extended with their own specific metadata.

Anyone (IT, Researchers, End-users, ...) can always access all their data, on all platform, through one single easy to navigate screen. They can retrieve exactly the file(s) they want without moving a batch of unnecessary contents.

It's easy to further customize for their future needs and they will get all the support they need through a mutual collaboration plan.

OBJECT STORAGE   TAPE STORAGE

STORAGE
MANAGEMENT

DATA
MANAGEMENT

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