Miria provides petabyte-scale life insurance for the University of Lausanne

CLIENT: UNIVERSITY OF LAUSANNE

SECTOR: **UNIVERSITY AND RESEARCH**

UNIL | Université de Lausanne

" UNIL wanted a protection for its unstructured data stored on two replicated Isilon NAS. Life insurance for our data. "

Pascal Jacot-Guillarmod,
Project Director on UNIL's steering committee

The university

The University of Lausanne (UNIL) comprises 7 faculties on a single campus on the shore of Lake Geneva. Much of the University's data storage requirements are generated by the medicine and biology faculties – for example DNA sequencing tests or the results of microscope samples which generate tens of millions of relatively small files.

- **Country:** Switzerland
- **Specialities:** Medicine-biology / social sciences / arts / theology / geosciences / law / business (HEC)
- **Key figures:** 15,000 students, 5,000 employees

The technical background

- Replicated Isilon NAS
- 300 million unstructured files
- 5% daily changes
- Workstations and endpoints multi-OS, CIFS & NFS
- Backup to ECS – Elastic Cloud Storage (EMC)

The challenges

- Perform a full monthly backup (legal obligation)
- Perform a daily incremental backup within the designated backup window
- Guarantee data preservation even if a cryptovirus hits
- Be able to restore to a different storage platform

The solution

- **Atempo Miria for Backup**
- Features: FastScan, Incremental Forever backup to S3-type storage

miria ATEMPO

IN ECONOMICS AS IN ECOLOGY, WE NEED TO LEARN HOW TO MAKE THE BEST USE OF AVAILABLE RESOURCES AND ENSURE THEIR FUTURE PRESERVATION.
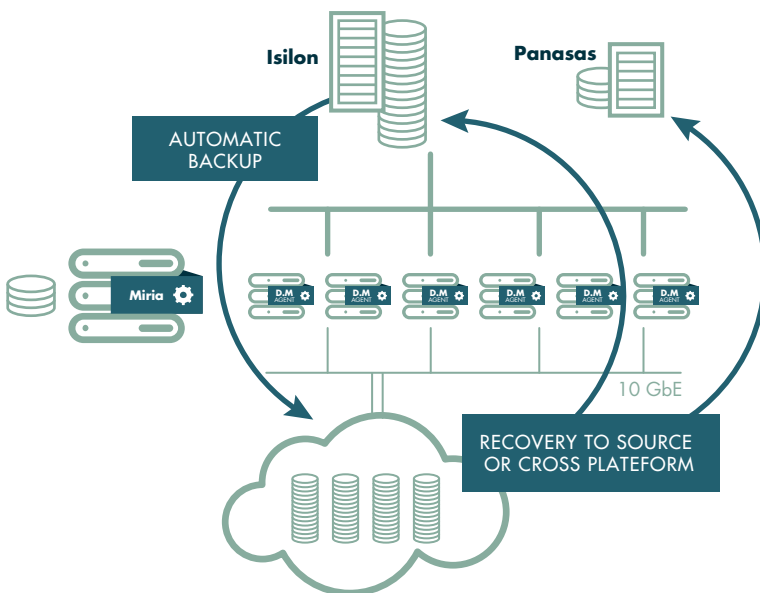
ATEMPO
preserving data ecosystems

The benefits

- The backup rapidly detects files that are created, deleted and modified on the storage,
- No full backup is required – the incremental forever limits the number of instances kept for each file
- Recovery at file or batch level,
- Total recovery possible in the event of a serious incident
- Restorations possible from multiple-storages

Architecture

Beyond traditional NDMP backups

- Even if the time between NDMP backups can provide a solution in the event of an infection or an attack on the primary or secondary storage -or both- there are nevertheless serious security limitations with this approach.

- An alternative and more flexible solution had become necessary; one which verified the integrity of the stored volumes. In this context, Atempo's solution was implemented for Isilon NAS backups without using the NDMP protocol.

- With Atempo's solution, UNIL can today rely on rapid, reliable and efficient backup of their very large data sets. They also have a genuine option to extend this technology to cover future archiving requirements..

" We have backed up our unstructured NAS data sets based on multi-OS sources while respecting ACLs. Thanks to Atempo, our NFS and CIFS file systems are working in perfect harmony with S3-type storage. "

Michel Ruffieux, Storage and Backup Manager, UNIL