FAST LTA

Customer Case Study | Silent Bricks | Tape Archive Replacement

How GNS manages growing evidence archives with WORM storage

The development and production of storage containers for radioactive waste generate large volumes of measurement and calculation data that must remain verifiable years later. GNS replaced a cumbersome tape archive with expandable Silent Brick storage, using WORM for immutable archive files and disk storage for faster access.

Documentation is part of the safety requirements

\GNS Gesellschaft für Nuklear-Service develops, among other things, containers for the transport and temporary storage of high-level radioactive waste and supports the dismantling of nuclear facilities. The design, production and use of these containers generate calculations and measurement data. Examples include ultrasonic tests during production and calculations for container loading. The data is checked, approved and archived as part of the supporting evidence.

According to the initial case study from 2020, calculations generally had to remain verifiable for fifteen years, while certain business documents were subject to a ten-year retention period. Other obligations could extend beyond these periods. GNS already had approximately 50 TB of calculations and measurements alone, alongside another 7 TB of email journals and documents from EASY Archive Exchange. The existing tape archiving required many manual operations and made data retrieval time-consuming.

The experience?

“Within the foreseeable future, we would no longer have been able to handle the volume of data we needed to archive using tape at reasonable costs.”

Daniel Schlick, Head of IT Applications at GNS



Photo’s: GNS Gesellschaft für Nuklear-Service mbH, September 2020

COMEX

Expandable storage with WORM as a permanent destination

Together with IT service provider CEMA, GNS explored how to keep its growing archive accessible at manageable costs. CEMA, a long-standing advisor to GNS and partner of FAST LTA, proposed the Silent Brick System. The configuration combined rewritable HDD and SSD modules with WORM modules for files that must no longer be modified once stored. GNS also considered the ten years of support promised by FAST LTA. According to the source, implementation with CEMA and FAST LTA took nearly four months.

Measurement and calculation data were archived on Silent Bricks WORM. GNS also saw opportunities to include other types of documentation and videos requiring long-term retention in the system at a later stage.

Less friction in a growing archive

According to GNS, the transition simplified its archiving processes. The company could expand storage modularly and access archived data at disk storage speeds.

What makes this choice effective is the alignment between the evidence process and storage management: finalised data is given an immutable location, while capacity can grow alongside new measurements.