

# Whitepaper

## Use case: ETERNUS CS8050 NAS Storage Appliance for Archiving

- Archive appliance for mid-sized business, and branch offices
- Trusted long-term storage and second-tier file storage
- Integrated SoftWORM, replication and backup functionality



### The unconditional reasons for archiving

As organizations continue to generate large volumes of files and new types of valuable data, there is an increasing need to retain, access, and protect business-critical data. This explosive data growth, along with stringent compliance requirements, rising security risks, privacy and compliance concerns are among the biggest challenges organizations face.

- In the digital business world, the balance and interaction between productive storage, second-tier storage and archive storage is essential to maximize operational and business efficiency and agility. Archives are becoming more and more an integral part of any modern, intelligent data protection strategy.
- Governmental requirements and legal liability are key reasons for implementing a data archiving strategy, as archives are typically used for the long-term retention of information. WORM functionality ensures that archived data is held in a non-erasable, non-rewritable format to fulfill the requirements for compliance archiving.
- Archives are also suitable as a target for offloading old and inactive data that will otherwise be part of the daily backup stream, causing an unnecessary burden for the overall backup process. Archiving can remove tons of data from the backup set. This reduces primary storage costs, as well as backup hardware and software costs. The amount of backup data is significantly reduced, resulting in faster backup and faster recovery processes.

### ETERNUS CS8050 NAS – an overview

The ETERNUS CS8050 NAS system is a reliable, cost-efficient storage appliance for archiving and second-tier file storage. The appliance ensures business efficiency, business continuity and fulfills compliance regulations.

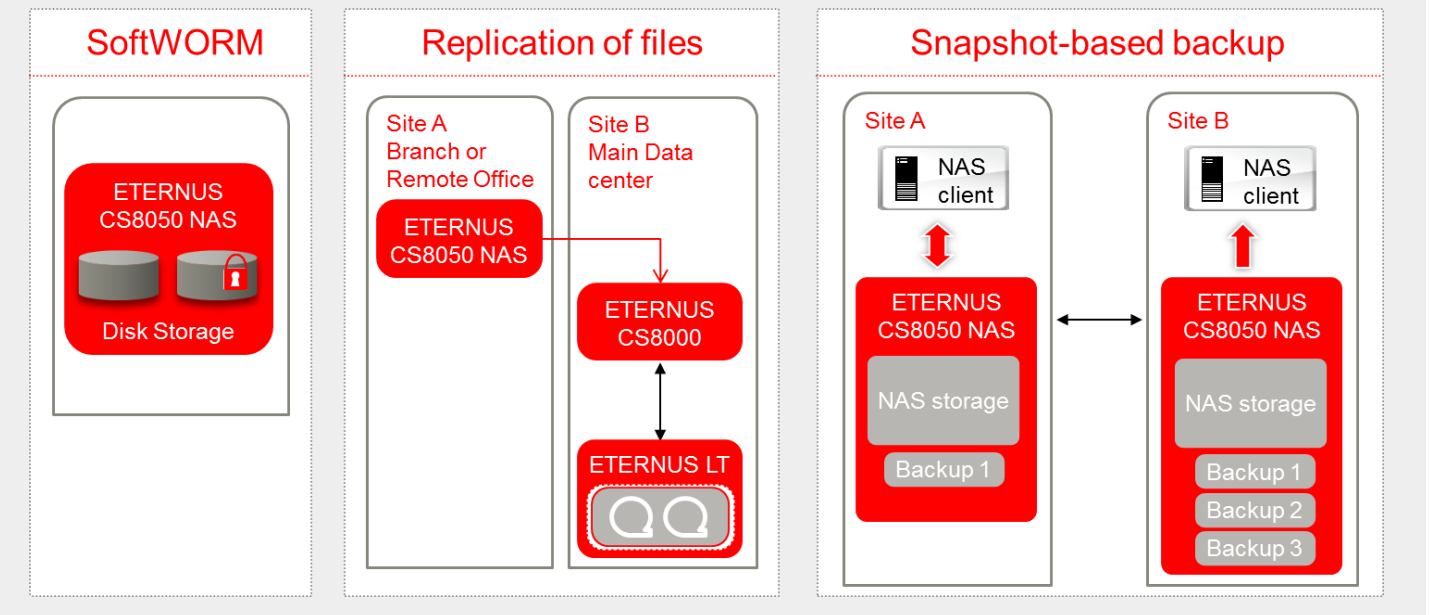
#### Highlights

- SoftWORM capabilities
- Replication to ETERNUS CS8050 NAS and ETERNUS CS8000
- Integrated Backup functionality

Model	CS8050 NAS
Type	Storage appliance for archiving
Capacity	28, 42, 56, 70 TB
Supported protocols	NFS / CIFS
NAS Front-end Ports	2 to 4 (1GbE or 10 GbE)
NAS Shares (max.)	256
Number of Files (max.)	200 Million
Number of Snapshots	100+
Height Unit standard	2 U

# More information

## Trusted, long-term storage with ETERNUS CS8050 NAS



### SoftWORM

Electronic documents must be trustworthy in order to legally safeguard business processes. Furthermore, when audits, assessments or legal issues arise, documents have to be provided quickly and completely.

ETERNUS CS8050 provides high-performance storage capacity on disk. And the requirements for compliant archiving are fulfilled on the disk layer with the SoftWORM functionality. Files are stored in a way, that they are unchangeable for a defined retention period. The parameters about which data need a WORM protection as well as the required retention period has to be provided by the archive software.

### Replication of files

For disaster resilience concepts ETERNUS CS8050 NAS supports asynchronous replication to a remote ETERNUS CS8050 NAS system. There is no extra replication software necessary. Data will be compressed to minimize the amount of replicated data. Data protection can be implemented among multiple sites, especially for long distance replication in the range of thousands of kilometers.

The ETERNUS CS8050 NAS is an entry-level model of the [ETERNUS CS8000 platform](#). This allows replicating data to a central ETERNUS CS8000 system, which supports a tape back-end. Data can be handled on associated tape libraries measured in Exabytes. Concepts can be realized to consolidate all company data cost efficient on tape.

### Snapshot-based backup

A replication to a second location is a disaster recovery copy – not a backup. The replicated copy helps to recover data if the primary storage system is gone, for example if the data center is affected by a catastrophic event like fire or flooding. But the disaster copy only allows to recover the latest status. For example if the user alters or deletes data accidentally, then this process is also replicated to the disaster copy. There is no generation management to go back to a previous version. This is the reason why a backup concept should also be realized for data within an archive storage.

Often, it could be complex and difficult to manage the backup of an archive with an external backup software. Therefore ETERNUS CS8050 NAS provides an integrated and automated snapshot-based backup. This functionality is well-adapted for the specific use case of archive and second-tier file storage data:

- The files are stored on ETERNUS CS8050 NAS
- These data can be replicated to a second ETERNUS CS8050 NAS or ETERNUS CS8000
- The appliance can create a local, snapshot based copy incl. generation management
- Also the snapshot based backup copies can be replicated to the other location

Different scenarios are possible. For instance the most recent backup may be stored at the local system, while the complete set of required backups like all daily backups of the last week can be stored at the second system – eventually stored on tape, using an [ETERNUS CS8000 system](#).