

Key Benefits

- > Reduces storage space, power, and cooling requirements by up to 80% for archived data, and up to 99% for combined backup and archive data
- > Facilitates the implementation of tiered storage policies that allow organizations to align the business value of data with the cost of the storage systems on which the data resides
- > Improves productivity by automating migration policies and providing easy, self-serve access to migrated files for search and discovery
- > Securely retain critical archive data on disk to comply with corporate IT governance policies related to secure data retention
- > Combines disk-based backup and archive data on a single storage platform to increase the ROI of storage assets
- > Increases the integrity of long-term disk-based archives through the use of RAID-6 and Data Domain's Data Invulnerability Architecture.
- > Easily implement deduplication with file locking to satisfy IT governance and compliance policies

Key Features

- > A single platform for multiple applications
- > Efficient snapshots for data protection
- > Efficient network replication for disaster recovery



The Challenges

1. Reducing Storage Costs for Nearline Data

Faced with explosive data growth, many enterprises are looking for a more cost-effective storage tier for their archive data in order to reduce demand for expensive primary storage space. As a result, movement of data to nearline storage is typically implemented in order to reduce the cost of storage from both a capital and operating expense standpoint. This is achieved by 'thinning out' data sets residing on primary storage that have older data (files, emails, database records) or that are deemed to have less business value. This also reduces the amount of primary data that must be backed up, making a reduction of the backup window a net-positive byproduct of the archiving process.

2. Data Retention for Litigation Support

Many companies have policies related to retaining email or file data for specific amounts of time for the purposes of litigation support. By migrating this data to deduplicated nearline storage, enterprises can retain more data on disk, making it easier to back up, search, and otherwise ensure auditors that key business data is being retained and is accessible at any time.

A more cost-effective archiving and nearline storage solution is required in order to justify these types of projects and allow an IT organization to retain a maximum amount of data on disk, while minimizing the overall footprint and power/cooling/space requirements in the data center.

The Solution

Data Domain and CommVault provide an easy-to-use and cost-effective archiving and data management solution that reduces the amount of storage needed to store archive data by up to 80%. Customers can realize significant benefits by combining their CommVault Galaxy backup data and CommVault Data Archiver data on a single Data Domain system to deploy a backup and archive solution that is easier to manage and more cost-effective than other traditional nearline storage solutions.

The data can then be Content Indexed and searched via CommVault's search web interface, a browser based interface that allows search, sort, select and retrieve of archive and backup data based on keywords and object attributes. This answers the need for discovery, compliance and legal search.

Reducing Nearline Data with Data Domain Systems

Unlike traditional nearline systems or tape, or narrow solutions such as VTLs or CAS, Data Domain systems provide unified, deduplicated, self-protecting storage for a broad spectrum of nearline applications. Data Domain's industry-leading inline deduplication technology eliminates redundant data at a sub-file level while it is backed up or archived, so enterprises can dramatically reduce the amount of required storage space.

Archived data will consume up to 80% less space when stored on a Data Domain system when compared to traditional disk-based storage. Backup data will consume up to 99% less space. As a result, data can now be effectively stored on local, highly available disk using a mere fraction of the capacity previously required. The vastly reduced data storage requirements can make it cost effective to retain much more data for longer periods of time in disk-based archives.

Cost-Effective Data Protection and Disaster Recovery for Archive Data

Data Domain systems provide integrated deduplicated snapshots for efficiently storing point-in-time versions of nearline data, deduplicated snapshot replication, and data protection for the many millions of files protected by Data Archiver. Data Domain systems also can efficiently replicate the data to a secondary site, providing DR capability for the archived data. Data Domain's replication technology only replicates unique data, minimizing the amount of bandwidth required and allowing customers to leverage slower network links for disaster recovery.

Data Domain also provides a Retention Lock software option that allows administrators to securely retain critical data by preventing deletion or modification during a specified data retention period. Retention Lock also provides the administrative flexibility required to allow authorized IT administrators to react to changing regulatory or security policies at any time by adjusting retention or security settings.

Transparent Data and Email Archiving using CommVault Data Archiver

CommVault Data Archiver provides a hierarchical data management solution that reclaims valuable primary storage space by automatically moving data to a Data Domain deduplication storage system as a nearline storage target. This solution also provides transparent access to end-users, who can see and recall migrated files by selecting them from the file system. Using Data Archiver, IT teams can redistribute their file stores across tiers of storage while reducing the overall cost of storage.

CommVault Data Archiver migration policies are unique compared to traditional solutions because they work inside existing file system directory structures. Data can be directly migrated from its original location, rather than moving it first to media staging folders. This offers a transparent access experience for end-users and applications because the access point remains identical to before it was migrated. Additionally, the remaining "stub" retains security properties of the original file. Organizations can classify data by application, plan its lifecycle over time, and utilize Data

Domain systems as the most appropriate and cost-effective nearline storage system for this data.

Email data is constantly growing in size and volume. The average corporate email user generates about 16.4MB of email data per day. This drives the need for storage and email administrators to employ policies to archive older messages and/or attachments to nearline storage. CommVault Data Archiver transparently migrates and recalls messages and/or attachments, allowing users to easily manage and access their messages that are efficiently stored on Data Domain systems.

Once the data has been archived to Data Domain nearline storage, CommVault can then Content Index the data for end-user or administrator led search. CommVault Content Indexing features FAST® market-leading search engine capabilities, supporting 77 languages and 370 data types. The easy to use web browser based interface allows keyword search through archive and backup documents as well as e-mails. Close integration with Active Directory ensures that users can only view data that they have permissions to. During an eDiscovery process, the search results can then be categorized into different result sets and made available to different stakeholders for further process-

ing. CommVault Data Archiver can also set the Retention Lock settings on a file-by-file basis, ensuring that the data is not deleted or modified while it resides on the Data Domain system for a specified length of time. Since the data resides on a Data Domain appliance, it is readily available and there is very little administrator involvement in the whole process.

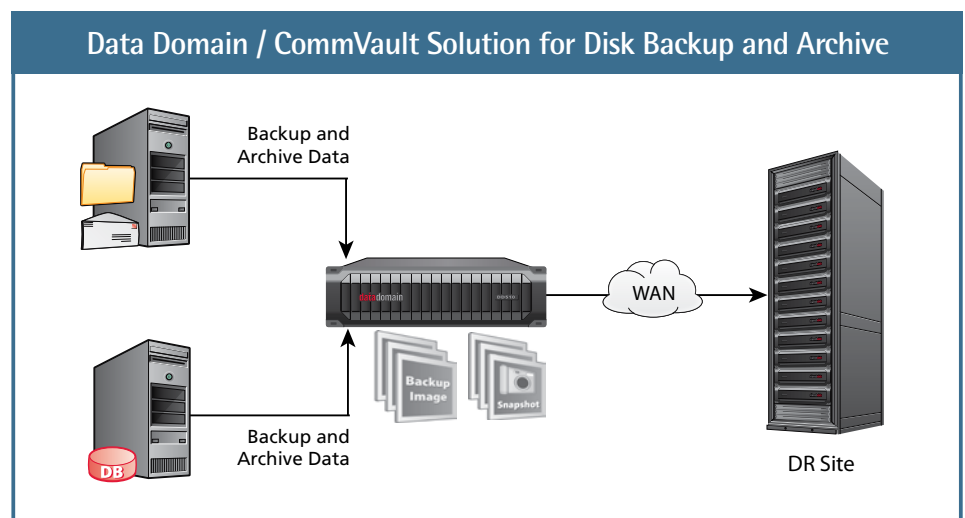
Single, Unified Solution for Data Backup and Archive

Commvault Data Archiver and Galaxy Backup products allow customers to manage backup and archive tasks from a single application. In addition, Data Domain systems can be leveraged to store data from both the backup and archiving applications, allowing users to deploy a unified infrastructure for both applications. The unified solution decreases both capital and operating expenses while improving backup time and increasing the retention period on disk for all of the data. In addition, since the data is stored in disk longer it can be content indexed and made available for end-user or ediscovery search and recovery without involving the administrators and wasting time looking for offline media. The ROI achieved is unmatched by any other combination of solutions on the market today.

Data Domain

2421 Mission College Blvd.
Santa Clara, CA 95054
866-WE-DDUPE; 408-980-4800
24 international offices
www.datadomain.com

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Data Domain and Commvault provide an industry-leading enterprise data management solution that leverages best-of-breed backup and file/email archiving software and high-speed inline deduplication storage. Customers realize dramatic cost savings by lowering capital, operating and infrastructure costs, and simplifying data management.