Quest®

NetVault® and FluidFS Architecture

Achieve new levels of scalability and protection.

Organizations are experiencing relentless growth of unstructured data, and traditional approaches to handling this growth have proven costly, hard to manage and difficult to scale effectively.

Dell Fluid File System (FluidFS) is a clustered file system designed to go beyond the limitations of traditional file systems with a flexible architecture that enables organizations to scale out non-disruptively. This innovative file system architecture provides innovative features for high availability, performance, efficient data management, data integrity and data protection. Organizations can gain control of their data, reduce complexity and meet growing data demands over time.

BACKUP AND RECOVERY

The sharp rise in unstructured data presents challenges for IT administrators tasked with protecting this data. They must ensure that backup operations take up minimal network bandwidth and occur within an accepted backup window. And

they must meet recovery service-level agreements (SLAs).

FluidFS supports business continuity through a resilient, purpose-built hardware architecture. Quest® NetVault® complements this architecture by protecting data stored within FluidFS. Together, the two technologies enable you to build a scalable, efficient and flexible backup architecture.

NetVault uses the open-standard Network Data Management Protocol (NDMP) to optimize the backup and restore operations. You can perform full and incremental backups. And since the data path and control path are separated, you can minimize the demand on network resources.

You also have the flexibility to choose the right data transfer model to maximize your infrastructure capabilities, including local, remote, three-way and shared transfer models.

BENEFITS:

Achieve unmatched levels of scalability and protection

- Scale out non-disruptively
- Efficiently back up and recover large volumes of data

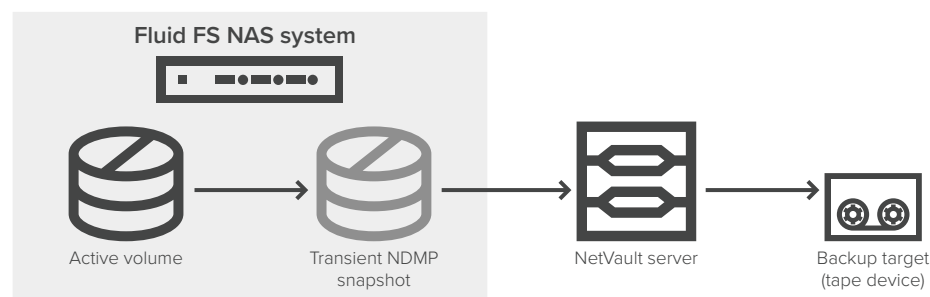**Dramatically shorten restore times**

- Quickly restore whole directories, single files or subsets of files

Protect snapshots and replicas

- Back up snapshots with no application downtime
- Restore data from or to a replica NAS volume

Target disk or tape

- Employ disk-based backup and deduplication to improve recovery times and reduce your backup storage footprint
- Meet compliance requirements for long-term storage by backing up to tape

Typical three-way (or remote) NDMP backup configuration

IMPROVE RECOVERY TIMES WITH DIRECT ACCESS RESTORE (DAR)

NetVault's DAR capability can dramatically shorten restore times for whole directories, single files or subsets of files. It records each file's location within the backup media, eliminating the need for NetVault to read sequentially through the entire backup set to locate and restore individual files. Only the portion of the backup media that contains the data to be restored is read, making it quick and easy to restore files or directories that are no longer available on snapshots.

PROTECTION FOR SNAPSHOTS AND REPLICAS

FluidFS offers efficient file-system snapshots and replication to help minimize data loss in the event of a disaster or site failure. When a backup is initiated, the FluidFS network-attached storage (NAS) system takes an NDMP snapshot of the active volume. NetVault uses this NDMP snapshot as the source, backing it up to a target storage device. Multiple backups can be run in parallel on the same volume. What's more, NetVault can perform an NDMP backup from a replicated volume, giving you a variety of options that can be employed to help you meet your aggressive recovery point objectives (RPOs) and recovery time objectives (RTOs).

TARGET DISK OR TAPE

NetVault supports a wide range of targets for storing NDMP backups, including different types of disk-based devices, virtual tape libraries (VTLs) and shared virtual tape libraries (SVTLs), as well as deduplication solutions (such as Quest QoreStor), virtual and physical tape libraries, autoloaders and tape drives.

ABOUT QUEST

Quest provides software solutions for the rapidly changing world of enterprise IT. We help simplify the challenges caused by data explosion, cloud expansion, hybrid data centers, security threats and regulatory requirements. Our portfolio includes solutions for database management, data protection, unified endpoint management, identity and access management and Microsoft platform management.

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