Replicating to the cloud with QoreStor

Simplify and speed replication for disaster recovery and archiving

Quest® QoreStor™ is a software-defined secondary storage platform used to accelerate backups, reduce storage requirements and costs, and replicate to the cloud faster and safer. By leveraging a cloud service like Azure, AWS, Google, IBM and Wasabi for archiving and disaster recovery, you can take advantage of the simplicity, security and redundancy of your chosen cloud platform.

INTRODUCTION

As you well know, replication is the process of copying your backups to a secondary location and is a key element in many disaster recovery strategies. QoreStor replication enables you to protect your systems, workstations and data by maintaining an up-to-date copy of them at a secondary location (local, remote or in the cloud), secured with AES-256-bit encryption.

Replicating to the cloud

Replicating to the cloud is one of the most significant components of a contemporary data protection strategy. With QoreStor, you can use a cloud service provider, to manage the remote QoreStor environment as a service, sometimes referred to as Disaster Recovery as a Service (DRaaS).

Replicating to the cloud leverages both cloud services and cloud storage. Cloud storage alleviates the burden of purchasing and maintaining expensive on-site storage for archiving and disaster recovery, especially in the face of rapid data growth.

Replicating to the cloud enables you to worry less about your infrastructure and focus more on your business, while meeting your data protection and disaster recovery requirements. Additional benefits of cloud-based replication include:

- **Scalability —** Cloud-based object storage is virtually unlimited in capacity with little or no additional overhead. Adding more storage is either a matter of contacting your cloud storage provider, or provisioning the space yourself using the provider's self-service web portal. Of course, adding storage usually increases cost.

- **Flexible service-level agreements (SLAs) —** Cloud storage can be set up with different SLAs to meet different storage requirements. For example, some cloud offerings target low-touch, long-term storage of data (AKA archiving), while others are designed for more immediate needs (e.g. disaster recovery).

- **Disaster recovery —** Replicating to the cloud enables you take advantage of the inherent high reliability and availability of cloud storage to meet higher business continuity standards without breaking your budget.

Cloud storage generally has built-in redundancy that provides an additional layer of data protection.

QORESTOR REPLICATION

QoreStor stores backups from your vendor of choice, compressing, encrypting and deduplicating the data to enable data storage savings of up to 20:1. Once deployed QoreStor provides managed and scheduled asynchronous replication, requiring at least two instances of QoreStor that are connected by either a LAN or WAN connections.

Specifically, replication is controlled via either managed replication from your backup software, or via the replication interface within QoreStor. Because replication is configured as a direct 1:1 relationship, this may serve as your disaster recovery copy, or as a long-term secondary copy whereby older generations of backups are replicated and stored until purged by applicable policy.
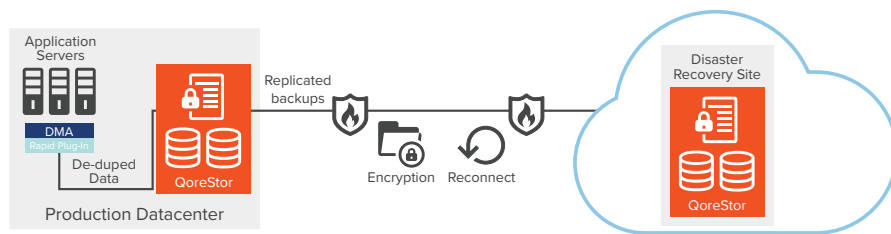
> QoreStor replication enables you to protect your systems, applications and data by maintaining an up-to-date copy of them at a secondary location.

Figure 1. QoreStor Replication

The QoreStor "source" replication instance (located in the production data center) can be deployed as a physical server or a virtual machine (VM) with support for Hyper-V, VMware and KVM. If deployed as a physical server, you may utilize hardware from virtually any vendor, and it will support up to 360 Tib of storage before de-duplication. When deployed as a VM, which is ideal for small datasets or for remote office locations, QoreStor will support up to 43 Tib of storage before deduplication.

The QoreStor "Target" replication instance may run within any private and public cloud, utilizing the purpose-built "Cloud Optimized" mode built into QoreStor. The Cloud Optimized mode is a tuned installation of QoreStor that supports up to 43 Tib of storage before deduplication and has been certified by Quest to run using a DS2v3 instance that will support data ingest rates of 1 TB/Hr.

To deploy QoreStor replication o the cloud, an appropriate cloud instance must first be acquired and an appropriately sized storage account that supports both the throughput and data volume must also be provisioned. To significantly reduce operating costs in the cloud, QoreStor may be deployed using cloud object storage.

Once configured, QoreStor will begin replication from Source to Target instances. By using QoreStor in the cloud, users will be able to quickly and efficiently set up offsite replication, instantly creating redundancy and reducing risk for disaster recovery — without any capital investment in hardware, and with no long term commitments.

Once operational, both QoreStor instances may be connected to Quest QorePortal, Quest's cloud-based management and reporting console. QorePortal displays alerts, diagnostics, storage savings and the overall health of all connected QoreStor instances. Furthermore, QorePortal contains a UI Proxy that enables complete management of any available and connected QoreStor instance from any internet-connected device.

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DIRECT BACKUP TO THE CLOUD

In addition to replicating backups to the cloud for disaster recovery purposes, QoreStor may also be used as a primary storage target for "direct to cloud" backups. Utilizing QoreStor Rapid Plugins, data is deduplicated at the source of the backup and then sent encrypted to QoreStor installed in the cloud. In case the network connectivity between the source and QoreStor becomes unavailable or unstable, the QoreStor SecureConnect feature will continually retry to complete the backup and data transfer. This helps ensure that your backups complete and your data is protected.
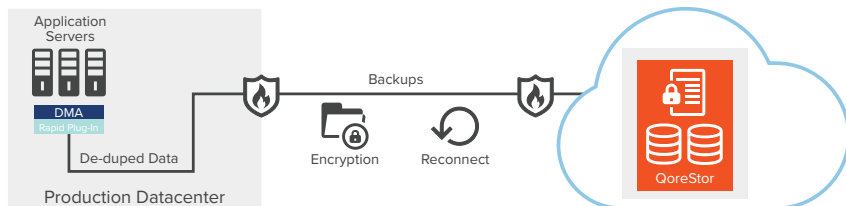

Figure 2. QoreStor Direct Backup to the cloud

QoreStor stores backups from your vendor of choice, compressing, encrypting and deduplicating the data to enable data storage savings of up to 20:1.

ABOUT QUEST

Quest creates software solutions that make the benefits of new technology real in an increasingly complex IT landscape. From database and systems management, to Active Directory and Office 365 management, and cyber security resilience, Quest helps customers solve their next IT challenge now. Quest Software. Where next meets now.

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