



Quantum Q-Cloud Protect

Secure, Off-Site Cloud Storage for DR

Q-Cloud™ Protect is a cloud service for Quantum DXi® disk appliances that allow you to securely replicate your on-site data to an off-site location for DR, for as low as 1 cent per GB per month. This service enables organizations to avoid expensive upfront costs of building and managing off-site data or tape vaulting, taking advantage of all the benefits cloud-based services have to offer.

Overview

The following table provides additional detail by identifying the items included in the service.

Attributes of the Service

- 1. Quantum provides 24x7 Phone Support and data transfer inclusive in the pricing.
- 2. Clients can protect 1TB to multiple PBs (logical deduped capacity) of data backups from their local DXi appliance.
- 3. With Q-Cloud Protect, patented deduplication technology is used both with the on-premise DXi and the DXi in the Q-Cloud Protect data center. This enables data reduction of up to 90% and reduces backup windows, network resources, and overall costs.
- 4. With on-premise DXi, fast local restores are done quickly and easily with no "in-and-out" or "put-and-get" charges associated. Complete control of your data with the local DXi enables you to continue with sending data to tapes or a second DR facility.
- 5. Replication functionality is included in the Q-Cloud Protect service offering. With only sending over changed blocks, since the previous backup/replication job, minimal bandwidth is required and a smaller storage footprint in the cloud is required as well. Depending on retention policies set by the backup application, data can reside in the cloud for as long as needed.
- 6. The use of military-grade encryption locally, while replicating to the cloud and while data is in the Q-Cloud Protect data center, is an included feature of the Q-Cloud Protect service. The DXi uses Self-Encrypting Drives with AES 256-Bit Encryption for data-at-rest, data in the cloud, and while replicating the data to the Q-Cloud Protect data center.
- 7. The DXi on-premise provides customers with a choice of either hardware or virtual machine (VMware vSphere 4.x and above). The DXi appliance delivers complete flexibility for data center or remote office protection.
- 8. The Q-Cloud Protect SLA is defined as 99.99% availability, but is also based on the public IP availability. Private/Fixed IP addresses are available for additional costs.
- 9. Bandwidth of up to 10Mb/s is included; additional bandwidth capacities available.
- 10. Fixed, public IP address is optional and priced separately for UK.
- 11. Private network connectivity from the client's network into the Quantum Q-Cloud Protect Data Centers is available at an additional cost.

Additional Services

- Private network connectivity 1Gbp/s or 10Gbp/s
- Private network implementation
- Buy-up of public bandwidth in 5, 10, or 20Mb/s increments
- WAN boosting options for recovery of files or whole DXi

Restores with Q-Cloud Protect

File-Level Recovery

- Restore files directly from local DXi.
- Please see the DXi User's Manual for more information on the process pertaining to the specific model of DXi on-premise.

DXi or Site Unavailable

- If using Symantec OST with NetBackup or Backup Exec, you may recover data directly from the cloud DXi once a backup server and network connectivity are available. Via OST, Symantec applications are aware of both the local and cloud copies and can manage them separately.
- If recovery 'over the wire' with OST is not practical, or when using a non-Symantec backup application, other options are available. The goal is to end up with a DXi at your site containing all of your backups. There are several ways to achieve this goal:
 - 1) Acquire a replacement DXi. Quantum will work with you to expedite this process.
 - 2) Decide how to seed the data onto the replacement DXi.
 - If network bandwidth is sufficient (or can be temporarily boosted), the new DXi may be installed at your site and repopulated over the WAN using the standard DXi replication process described in every DXi User Guide.
 - Alternatively, the new DXi may be shipped to the Q-Cloud Data Center, seeded over a high-speed network, then shipped to your site fully populated.

Requirements & Assumptions

Configuration & Set-Up: The on-boarding process involves setting up users with various roles (workload owner, approver, and workload access). It also involves setting up customer-specific Network VLANs, firewall rules, and policy groups.

- 1. The Q-Cloud Protect solution leverages the Quantum Q-Cloud Cloud infrastructure.
- 2. Quantum Q-Cloud Protect will follow standard ITIL processes for Incident Management and Change Management.
- 3. Quantum Q-Cloud Protect will determine maintenance windows and will publish the maintenance window schedule. No notification will be provided for non-disruptive changes. Disruptive changes will be coordinated with Channel Partner and customers.
- 4. Quantum Q-Cloud Protect will determine the Quantum appliance versions to be implemented for each client instance and for the leveraged components. Software version upgrades for each clientspecific instance will be determined in collaboration with the client or Channel Partner. Professional Services required for any software upgrades will be priced separately.
- 5. Software versions that are no longer supported by vendor will not be allowed. Quantum Q-Cloud Protect will provide links to current Backup Data Manager software and will work with the client to sync Quantum Q-Cloud Protect and Client software versions.
- 6. Technology support as required to support SLAs.
- 7. Customer signs minimum 12-month service contract.
- 8. Customer can buy more storage by committing to a new 12-month term.
- Quantum Q-Cloud Protect is currently only available in US, Canada, and UK.

Service Objectives and Commitments

Objective: Availability of Platform				
Incident Resolution Time				
Ticket Severity	Service Measure	Performance Target	OLA/SLA Performance %	
DXi Appliance	Availability	99.5	95%	
	Measure Interval	Measure monthly, report monthly. Excludes planned outages.		

Service and Support

Quantum StorageCare Service and Support for Quantum Cloud customers delivers 24x7 access to support resources that will respond to service requests related to the Q-Cloud environment.

- Service issues on the Quantum DXi devices or the Q-Cloud environment can be logged with Quantum support teams via phone, email, or the Quantum electronic service request form any time, day or night, from any customer location. Such service requests will receive a response based on the severity of the situation that prompted the service request. For critical situations, the customer will hear from Quantum within 30 minutes.
- Quantum provides 24x7 hour response time coverage on the target DXi system located in the Q-Cloud Data Center as a standard part of the Q-Cloud subscription. This is Quantum's StorageCare Gold Service Level offering, the highest level of service offered by Quantum.

Quantum StorageCare Gold Services on Target DXi Products include:

Quantum Global StorageCare Services Available to Quantum Cloud Clients			
Global telephone support	24x7		
24x7 access to online support tools	✓		
Proactive remote monitoring	✓		
Parts delivery	24x7		
Onsite parts replacement	24x7		
Latest software and firmware updates	✓		
Product training	✓		
Provisional loaner*	✓		

^{*}Provisional loaner equipment available to maintain production environments in the event of a jointly agreed upon customer outage; configuration determined by Quantum.

Quantum Global StorageCare process response times for target systems in the Q-Cloud Data Center are based on defined problem severity levels. The Service Level Objectives are:

- Call-Back Response Target: 30 minutes for critical, 60 minutes all others
- Parts Delivery Target after problem determination: 4 hours for critical, 8 hours for major, 12 hours for minor
- Onsite Support Target after problem determination: 24x7 support (4 hours for critical, 8 hours for major, 12 hours for minor)

Customers have the option to choose the service level appropriate for their operational requirements for the Source DXi System. Standard support levels include StorageCare Gold Service comparable to that provided on the Target System, StorageCare NBD Gold, and StorageCare Bronze offerings. Quantum StorageCare Service offerings are presented at:

www.quantum.com/serviceandsupport/services/disk-based/index.aspx



ABOUT QUANTUM

Quantum is a leading expert in scale-out storage, archive and data protection, providing solutions for sharing, preserving and accessing digital assets over the entire data lifecycle. From small businesses to major enterprises, more than 100,000 customers have trusted Quantum to address their most demanding data workflow challenges. With Quantum, customers can Be Certain™ they have the end-to-end storage foundation to maximize the value of their data by making it accessible whenever and wherever needed, retaining it indefinitely and reducing total cost and complexity. See how at www.quantum.com/customerstories.

