

# DXi SECURE SNAPSHOT



## TECHNOLOGY BRIEF

Ransomware attacks are becoming more sophisticated than ever before. Immutability through isolation of backup data is a critical component of an effective ransomware recovery plan. DXi® provides a powerful solution for meeting backup needs and SLA requirements that helps minimize disk requirements, shrinks replication bandwidth needs, and supports all protocols, NAS, OST, VTL, etc. This technology brief describes the DXi Secure Snapshot feature in Quantum’s DXi appliance and how it protects backup data.

### DEVELOPED WITH DATA SECURITY, IMMUTABILITY, AND RECOVERABILITY IN MIND

While a physical air gap is simply the best and surest way to protect your data from ransomware due to its inherent ability to create a physical barrier, it does not provide for the fastest recovery. In DXi Secure Snapshot, there is a protocol separation that enables snapshots to be placed in an isolated, secured location that is non-network addressable. This creates a barrier or “gap” between the network and the secured and immutable location that is invisible to the network. With this mechanism, users can be assured that the DXi Secure Snapshot feature will defend and quickly recover their data, reducing downtime.

### DXi SECURE SNAPSHOT

DXi Secure Snapshot allows for the secure isolation of backups in a tier that is non-network addressable. These snapshots cannot be deleted or encrypted, making backups (snapshots) immutable, which means backups can be managed to meet SLA-required RTOs and RPOs.

Data is recoverable immediately\* because snapshots will be available in their immutable state in the DXi backup appliance, and become visible to the backup application as soon as the recovery begins. Point-in-time snapshots are quickly identified, and customers can restore images to a newly created share.

\*Larger shares may take longer to recover.

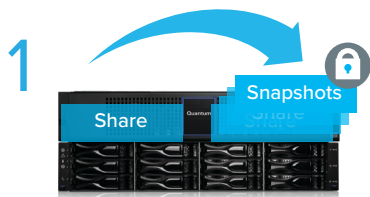
### FEATURE HIGHLIGHTS

DXi Secure Snapshot provides a first-level defense against ransomware:

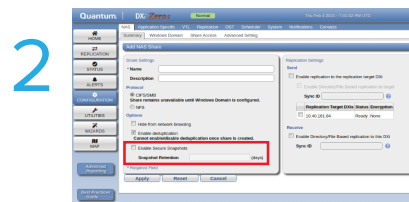
- No datapath access.
- Attacker is unable to use generic attacks on mounted backup file system.
- No use of DXi GUI or Rest API to delete snapshots.
- Attacker cannot access DXi to delete or encrypt snapshots.
- Creation, control, and monitoring via management interface.

### BENEFITS

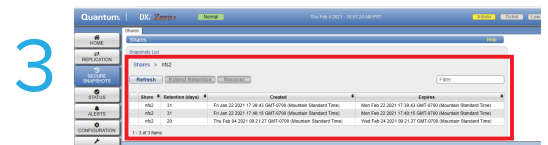
- Immutable snapshots to isolate your data.
- Quickly and successfully recover to meet SLAs.
- Never pay ransom again – No loss of reputation, customers, or trust.
- Always be in control of your data. Never lose visibility with user-friendly management interface.
- No additional licensing fees required.



Snapshots of shares are taken and put in a non-network addressable location



Kept for specified time, then automatically deleted



Admin chooses snapshot(s) to restore via management interface



Snapshots are placed in an isolated, non-network secure location in the DXi appliance.

### BACKUP RECOVERY EXAMPLE

If a backup image is compromised from a ransomware attack:

1. The compromised bits would be stored in the blockpool, and snapshots would continue as normal.
2. To recover from the attack, Snapshot A (Figure 1) is restored.
3. As a result, the file system has been restored to the condition it was in before the attack (Figure 2).

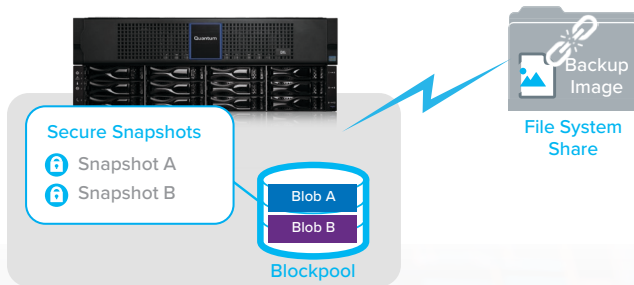


Figure 1.

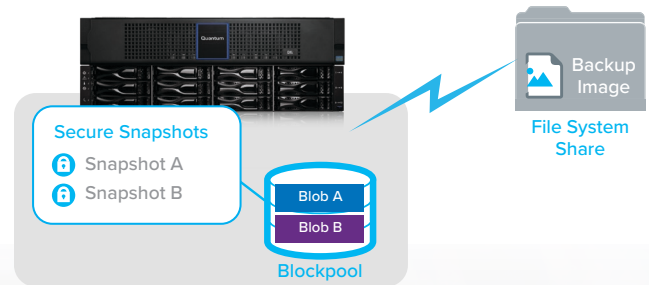


Figure 2.

## Quantum

Quantum technology, software, and services provide the solutions that today's organizations need to make video and other unstructured data smarter – so their data works for them and not the other way around. With over 40 years of innovation, Quantum's end-to-end platform is uniquely equipped to orchestrate, protect, and enrich data across its lifecycle, providing enhanced intelligence and actionable insights. Leading organizations in cloud services, entertainment, government, research, education, transportation, and enterprise IT trust Quantum to bring their data to life, because data makes life better, safer, and smarter. Quantum is listed on Nasdaq (QMCO) and the Russell 2000® Index. For more information visit [www.quantum.com](http://www.quantum.com).

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