Ransomware protection packages combine tape libraries with a built-in, off-network vault.

THE RISING THREAT OF RANSOMWARE
The threat of ransomware continues its onslaught on the enterprise backup environment. Ransomware infections rose by 12% in 2019, targeting storage and mobile applications. These cyber attacks are getting more sophisticated and are holding organizations hostage until they pay millions in ransom.

Although most companies regularly back up data, they are still vulnerable to ransom attacks that target entire networks and backup systems, and even the cloud. Tape storage is the most effective protection against ransomware, because it provides an offline, air-gapped copy due its physical separation from the network—making tape inherently secure.

RANSOMWARE PROTECTION PACKAGES: OFFLINE DEFENSE BUNDLES
To provide an offline defense against ransomware, we created Ransomware Protection Packages, three pre-defined hardware/software bundles ranging from 600 TB to 2.4 PB of storage specifically designed to be the most secure way to truly store your data offline.

FEATURED BENEFITS
• Proven Security Protection. With tape, data is stored offline, making it an inherently secure solution against modern cyber attacks. Ransomware Protection Package features, including military-grade encryption and Write Once Read Many (WORM) technology, protect your data against cyber attacks.
• Minimize Complexity, Maximize Efficiency. Quantum’s unique Active Vault feature and high-performance LTO drives automate media handling, which increases performance and operator efficiency.
• Cost-effective, Reliable Long-term Storage. With up to 30 TB of capacity, Quantum LTO tape can store more data in a single cartridge at the lowest cost of any other media type. In addition, power, rack space costs, and data center footprint are dramatically reduced.
• Saves Operator Time by Eliminating Manual Media Handling. With Active Vault, the operator does not have to leave their desk to physically interact with the library or media.
• No Egress Charges to Recover Data. When your copies on disk have been compromised, simply move the tapes back using the library GUI and the tape library does the rest. You pay no extra fees.
Ransomware Protection Packages come in three pre-configured versions to simplify the selection process for choosing the capacity you need protected. Feature highlights include:

- Small, medium, and large capacity points configured for simplicity.
- Quantum’s Active Vault feature combines inherently secure LTO and WORM technology with ultra-secure military-grade encryption to create a secured “Ransomware-Free Zone.”
- Most cost-effective data protection solution for offline, long-term storage.
- Configure a new system or easily add to existing Quantum Scalar® i3 and Scalar i6 tape libraries.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Small – 3U</th>
<th>Medium – 6U</th>
<th>Large – 12U</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity*</td>
<td>Up to 600 TB capacity</td>
<td>Up to 1.2 PB capacity</td>
<td>Up to 2.4 PB capacity</td>
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<tr>
<td>Recommended Configuration**</td>
<td>Scalar i3, 50 total slots One (1) LTO-8 HH drive Twenty (20) LTO-8 tapes</td>
<td>Scalar i3, 100 total slots One (1) LTO-7 HH drive &amp; One (1) LTO-8 HH drive Twenty (20) LTO-8 &amp; Twenty (20) LTO-7 tapes</td>
<td>Scalar i6, 200 total slots Three (3) LTO-8 FH drives One hundred (100) LTO-8 tapes</td>
</tr>
<tr>
<td>Support</td>
<td>One-year 5x9 Bronze</td>
<td>One-year 7x24xNBD Gold</td>
<td>One-year 7x24x4 Gold</td>
</tr>
<tr>
<td>Ransomware Protection Software Add-On for Existing Scalar Libraries***</td>
<td>• Active Vault software license • Advanced Reporting software license</td>
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</tbody>
</table>

Additional Terms and Conditions apply. Promotional pricing applies to all regions worldwide except EMEA. *Capacities referenced above can be any combination of backup storage and Active Vault storage, as defined by the administrator. Backup storage slots must be licensed with Capacity-on-Demand licenses. **Any variations to advertised recommended configuration may alter promotional starting price. Prices valid now through December 31, 2020. ***No additional purchase of hardware necessary to purchase software add-on bundle. Please contact your authorized Quantum reseller for more details.
SCALAR ACTIVE VAULT
Provides automated movement into an ultra-secure, offline vault.

Quantum’s unique Active Vault—a feature of Quantum’s Scalar tape libraries—enables you to keep an ultra-secure, air-gapped copy of data that is also protected from human error. The Active Vault feature builds on tape’s inherently secure offline nature by creating a totally offline vault within the library itself creating a secure “Ransomware-Free Zone.” The automated in-library vaulting cuts out the manual need to handle tapes or transport them, which greatly reduces the chances of tape damage, contamination, or human error.

1. Data is backed up to tape, frequency depends on RPO.
2. Administrator uses policy to “export” tapes to secure, in-library vault.
3. Tapes reside on shelf in the vault. No network connectivity. Tapes can only be retrieved from vault using administrator-directed command.

**RANSOMWARE PROTECTION PACKAGES**

**SCALAR® VAULT**
Ultra-secure and totally offline In-library vault

**Key Active Vault Benefits**
- Provides ultra-secure, offline data storage
- Automates media handling, increasing performance and operator efficiency
- Write Once, Read Many (WORM) Technology ensures no overwritten data while maximizing storage capacity
- Transparent to applications
- Enables lights-out and remote vaulting
- Eliminates risk of physical media damage or loss
- Secures media from accidental/malicious exposure such as negligence, human error, or insider threats
- Enables proactive media condition monitoring and alerting

**Key Benefits**
- Eliminates tape damage and loss. Eliminates risk of physical media damage or loss which is another danger that can put vaulted data at risk—media degradation. EDLM is an optional feature available on the i6 package. Tape drives used for EDLM scanning have their external data ports disabled, so the integrity of the Active Vault is maintained. Even if these drives are accidentally connected to the storage network, no data may be accessed.
- Reliability and security. Active Vault provides security for data in several ways. AV partitions may not be exposed externally to applications. The library software simply does not allow it. An operator cannot accidentally put vaulted tapes “online,” exposed to threats. AV partitions also contain no tape drives, providing an additional barrier to access.
VAULTING PROCESS FLOW
The above illustration shows the operator experience with manual vaulting vs. Active Vault. With Active Vault, the operator takes no additional steps and does not have to leave their desk to physically interact with the library or media. The library can even be in a lights-out facility thousands of miles away.

FOR MORE INFORMATION
For more information about Ransomware Protection Packages and Active Vault, visit: www.quantum.com/ransomware-protection