



Scalar Key Manager

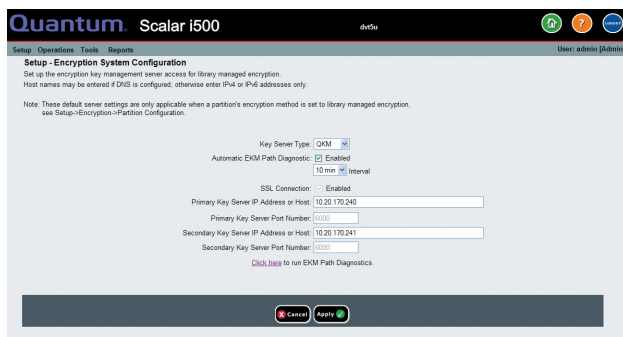
Simplified Encryption Key Management for Scalar Tape Libraries

The demand for encryption continues to increase as the need to mitigate risks of data breaches, protect brand reputation, and comply with privacy and data protection regulations also increase. The escalating costs of data breaches are driven by lost customers and lost business, customer notifications, legal services, and consulting services. In addition, many companies find that one of the biggest costs of a data breach is the damage it can do to your brand. Encryption mitigates the risks of these costs by protecting your data even after it leaves the data center. Encryption also helps companies comply with increasing regulations around security and privacy.

Scalar® Key Manager is simple, easy to manage, and is designed to enable encryption for Scalar Library installations of all sizes. Scalar Key Manager integrates directly with Quantum's Scalar tape libraries to provide a simple, centralized security solution designed to work with encryption-enabled LTO drives. It offers high-availability key management that can be integrated simply into existing backup architectures, and is FIPS 140-2 Validated. Scalar Key Manager also offers customers flexible implementation options. It can be installed as a pair of servers, or as a pair of virtual machines in a VMware environment. Scalar Key Manager enables Quantum tape library customers to have a federally certified security solution, while maintaining simplicity for encryption key management across all Scalar library units in the data center and in remote locations.

Integrated with Quantum's Scalar Libraries

Scalar Key Manager is fully integrated with the Scalar series of tape libraries to reduce the time that IT managers need to spend managing their encryption solution. The Scalar Key Manager setup, configuration, management, and even diagnostics are all accomplished through the native Scalar library user interface. Since there is no additional interface to manage, this integration further simplifies initial setup and the ongoing administration of your security solution.



FEATURES AND BENEFITS

- **Simplified Encryption Key Management** – Scalar Key Manager is integrated with Scalar tape libraries, enabling simplified administration of the encryption key management process. Encryption setup, configuration, and administration are all completed through the library interface.
- **FIPS 140-2 Level 1 Validated** – FIPS 140-2 Validated by the National Institute of Standards and Technology to support the highest levels of security.
- **Highly Available Solution** – The Scalar Key Manager comes standard in a redundant configuration for HA.
- **Scalable Solution for Distributed Environments** – Scalar Key Manager can centrally manage your encryption keys across the data center and remote sites, and will scale with ever-growing data demands.
- **Flexible Implementation Options** – Scalar Key Manager can be installed as a pair of HA appliances or as HA virtual machines running under VMware.

Minimize Complexity of the Key Management Process

Quantum's Scalar Key Manager is customer-installable, and setup and configuration are easily accomplished through the simple, intuitive Scalar library user interface. Once Scalar Key Manager is installed and encryption is enabled, Scalar Key Manager handles all of the key management tasks, including key creation, tracking the relationship between keys and tapes, and synchronizing key databases between the primary and secondary appliances. No further direct involvement is required from the end user—the solution is “set-and-forget” simple, and the end users can rest assured knowing their data is secure.

Compliance with Federal Security Standards

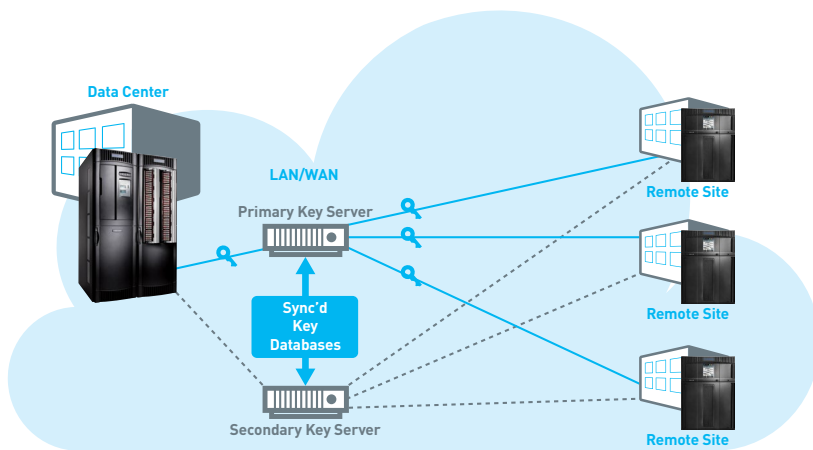
Scalar Key Manager is FIPS 140-2 Validated, which is a federally approved level of security. Purchasing a key management solution that is FIPS-validated means that the underlying cryptographic key management software and hardware is sufficiently robust to meet federally adopted standards of security. In addition, Scalar Key Manager comes standard in a high availability (HA) configuration that provides redundancy and failover for the encryption key management process.



Scalable Solution for Distributed Environments

Scalar Key Manager is the ideal solution to centrally manage the encryption key process across systems and sites. It can manage the encryption key process for one system or all the systems in your environment, while providing a platform that can scale with data growth.

Scalar Key Manager Appliance Example Architecture



TECHNICAL SPECIFICATIONS

GENERAL

- Built to comply with the FIPS 140-2 Level 1 federal security standard
- Centralized, scalable solution to manage keys across multiple tape libraries and multiple locations
- High Availability configuration with redundant, synchronized key servers
- Customer installable
- Integrated directly with Quantum Scalar tape libraries (managed through the native tape library GUIs)
- Support for LTO-4, LTO-5, LTO-6, and LTO-7 drive-based encryption
- Ability to import & export keys to facilitate key sharing

APPLIANCE SPECIFICATIONS

Server Form Factor*:	1U, rackmount
Server Weight*:	24.3 lbs
Server Dimensions (H x W x D, in)*:	1.7 x 17.3 x 22
Operating Temperature:	10°C to 35°C at 914.4m
Humidity, Operating:	8% to 80%

*The Scalar Key Manager appliance option includes an HA pair of servers.

VM SPECIFICATIONS

Requires VMware ESX or ESXi, 4.0 (64-bit) or 5.0 (64-bit)	
Resources required for each Scalar Key Manager VM server:	(1) Ethernet interface (1) CD/DVD ROM Drive 1GB RAM 8GB of disk space

SUPPORTED PRODUCTS

- Scalar i6000 with IBM LTO-5, LTO-6 and LTO-7 drives
- Scalar i6000 with HP LTO-4, LTO-5 and LTO-6 drives
- Scalar i6 with IBM LTO-6 and LTO-7 drives
- Scalar i500 with IBM LTO-5, LTO-6 and LTO-7 drives
- Scalar i500 with HP LTO-4, LTO-5 and LTO-6
- Scalar i3 with IBM LTO-6 and LTO-7 drives
- Scalar i40/i80 with HP LTO-4, LTO-5 and LTO-6
- Scalar i40/i80 with IBM LTO-5, LTO-6 and LTO-7 drives

ABOUT QUANTUM

Quantum is a leading expert in scale-out tiered storage, archive, and data protection, providing solutions for capturing, sharing, and preserving 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. Quantum's end-to-end, tiered storage foundation enables customers 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.