

# End-to-End Security and Encryption with QuantaStor SDS

Maintaining secure systems is an increasingly important and challenging practice for IT organizations of all sizes. To ensure strong security enforcement, QuantaStor SDS includes end-to-end security coverage enabling encryption on-the-wire and encryption-at-rest to ensure that sensitive information is secure and compliant to security standards including HIPAA and CJIS.

## On-the-wire Encryption

QuantaStor SDS appliances secure administrative management access via HTTPS with strong SSL/TLS cipher enforcement. Further, storage access is secured via SMB3 encryption for Windows users and IPsec for iSCSI and NFS client access. QuantaStor's unique storage grid technology links appliances together so that they can be managed as a homogeneous unified system so all intercommunication between nodes and remote-replication activity is also secured using SSL/TLS.

## Data-at-rest Encryption

Besides ensuring that all network traffic is encrypted, it's important that the data at rest on the storage media is also encrypted-at-rest. QuantaStor supports and integrates with hardware encryption technologies like LSI's SafeStore and also provides complete software encryption for data-at-rest using AES256 level encryption. Software encryption is accelerated by as much as 8x on systems with Intel AES-NI technology which is a special processor built into all Intel Xeon and AMD Opteron chips. Encryption-at-rest is available across all QuantaStor configuration options including HA SAN/NAS configurations and scale-out object configurations.

## Authorization

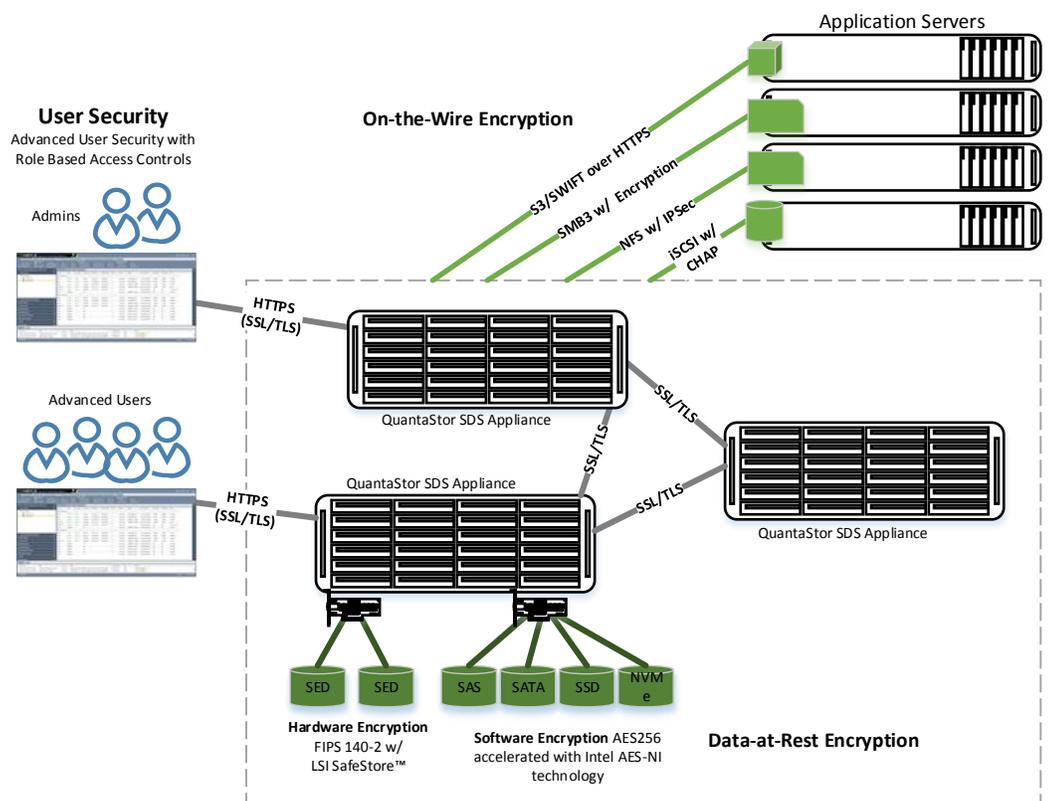
QuantaStor's advanced Role Based Access Control (RBAC) system is one of the most advanced in the industry allowing administrators to effectively scope and delegate access to users and administrators, providing no more access than is necessary. This is especially important in health-care and law enforcement environments which must enforce compliance to HIPAA and CJIS security standards.

## Security Policies

QuantaStor makes enforcement of user password management easy through security policies which are tunable to meet strong enforcement and compliance standards. These include things like password complexity, length, expiration, maximum retries before lock-out and more.

## Summary

OSNEXUS is dedicated to delivering one of the most secure SDS offerings on-the-market with the QuantaStor SDS platform to ensure that the data of governments and organizations large and small are safely protected and secured from a myriad of threat vectors.



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### About OSNEXUS

OSNEXUS is a leading manufacturer of hyper-scale SDS solutions with the QuantaStor™ Software Defined Storage (SDS) platform. QuantaStor SDS provides NAS, SAN, and Object storage in a single platform with unique storage grid technology to simplify the process of managing multisite and multi-PB storage environments. QuantaStor SDS is sold worldwide through, OEMs, VARs, MSPs, and System Integrators to provide customers with packaged turn-key solutions.