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A Broadcom Company

Hitachi Vantara

Solution Profile

Protect AI Intellectual Property with Quantum-Safe Security by Design

Future-proof AI investments

Eliminate Security Gaps

A single security fabric protects AI data end-to-end, eliminating vulnerabilities that arise from managing separate storage and SAN policies.

Deploy Quantum Protection Now

Full-stack quantum-resistant security with 256-bit encryption and Root of Trust safeguards data against current and future threats.

Ensure Defense-in-Depth

FIPS 140-3 Level 2 certification, enhanced anti-tampering features, and robust access controls provide comprehensive security that evolves to address evolving threats.

Enterprise AI workloads demand security that protects valuable intellectual property against both current threats and emerging quantum computing risks.

Organizations investing heavily in AI development face a critical security challenge: managing separate storage and SAN vendors creates policy gaps that put AI intellectual property at risk. Training datasets represent years of research. Proprietary AI models are worth millions. Sensitive inference data all require comprehensive protection.

The challenge intensifies with quantum computing. Security experts predict that quantum computers capable of breaking current encryption are on the horizon. Data protected today using conventional approaches may become vulnerable tomorrow.

Managing security across separate storage and SAN systems creates operational complexity:

- Inconsistent security policies across vendors create exposure gaps
- Manual correlation of security events delays threat response
- Separate encryption implementations add management overhead
- Compliance reporting requires coordinating multiple vendor frameworks

Traditional approaches can't address these challenges. Organizations require a security architecture tailored to AI workloads, such as a unified security fabric that protects data seamlessly without compromising performance.

The Hitachi VSP One Block High End integration with Brocade Gen 8 delivers quantum-safe security by design, eliminating gaps while future-proofing AI investments.

Quantum-Resistant Foundation

256-bit encryption with a Root of Trust delivers quantum-safe protection across the infrastructure.

Continuous Security Validation

Hardware and software integrity validation ensures security posture remains intact.

Unified Threat Intelligence

Integrated monitoring automatically detects anomalies and security configuration changes.

Compliance-Ready Architecture

FIPS 140-3 Level 2 certification meets stringent regulatory requirements.

Solution Profile

Protect AI Intellectual Property with Quantum-Safe Security by Design

Hitachi + Brocade. Two Leaders. One Enterprise AI Solution

Future-Proof Security Architecture Built for Enterprise AI Protection

Protecting enterprise AI infrastructure shouldn't require choosing between comprehensive security and operational simplicity. The Hitachi VSP One Block integration with Brocade Gen 8 delivers quantum-safe security by design, protecting AI intellectual property end-to-end.

This solution combines Hitachi's cyber-resilient storage with Brocade's quantum-resistant SAN security, creating full-stack protection with 256-bit encryption and a Root of Trust that secures data across storage and the network. Enhanced anti-tampering, backed by FIPS 140-3 Level 2 certification, delivers defense-in-depth, while strong access controls minimize attack surfaces.

Brocade's advanced cryptographic algorithms protect SAN fabrics while reducing the risk of hijacking. Continuous monitoring alerts teams to configuration changes, and hardware and software integrity validation ensures the infrastructure remains secure.

VSP One Block High End provides encryption-at-rest with FIPS compliance, dual parity protection, and integrated snapshots. Combined with Brocade Gen 8 quantum-safe networking, organizations gain seamless protection from data ingestion through inference deployment.

The result? A single security fabric that future-proofs AI investments while maintaining microsecond performance. VSP One Block High End's immutable snapshots, end-to-end encryption, and validated ransomware detection, combined with Brocade Gen 8's quantum-safe security, enable immutable recovery and establish a strong security posture for AI clusters.

This integrated protection safeguards model weights and proprietary datasets against ransomware attacks and future quantum threats, enabling organizations to recover quickly without paying ransoms or losing critical AI intellectual property. IT teams manage security through unified interfaces instead of coordinating separate vendor policies.

Use Cases

Protect Proprietary AI Models and Training Data

Organizations investing millions in AI research need comprehensive protection for their most valuable assets: proprietary algorithms, training datasets, and inference models that represent years of competitive advantage.

The challenge? Fragmented security policies. When storage and SAN systems operate independently, inconsistent access controls create exposure. One vendor implements encryption at rest. Another secures data in flight. But the gaps between systems leave intellectual property vulnerable during transfers and processing.

The Hitachi + Brocade integration eliminates these vulnerabilities through unified security management. Access controls span both infrastructure layers, ensuring only authorized users reach sensitive AI assets. VSP One Block's encryption-at-rest protects training datasets. Brocade's in-flight encryption secures models during distribution to production systems. Enhanced anti-tampering detects unauthorized modifications before they compromise model integrity.

Result: *R&D teams develop AI innovations with confidence that proprietary work remains secure throughout the development lifecycle, from initial training through production deployment, using a single security framework rather than coordinating separate vendor policies.*

Streamline Regulatory Compliance for AI Workloads

Financial services, healthcare, and government organizations face mounting regulatory pressure around data protection. HIPAA, GDPR, and federal standards demand comprehensive audit trails, encryption certifications, and tamper-evident infrastructure. Demonstrating compliance becomes exponentially complex when security policies span multiple vendors.

Unified FIPS 140-3 Level 2 certification across the integrated platform transforms compliance from a coordination challenge into a streamlined process. Security teams present regulators with a single, comprehensive security architecture rather than stitching together documentation from separate vendors.

Automated monitoring provides the required audit trails without manual correlation. Configuration change alerts create comprehensive records. Integrity validation demonstrates tamper-free infrastructure. And, organizations can prove proactive compliance through unified reporting that covers both storage and network security.

Result: *Security teams reduce audit preparation time by half while strengthening their compliance posture. When regulators require evidence of quantum-resistant security measures, organizations demonstrate forward-thinking protection rather than scrambling to retrofit aging infrastructure.*

Deploy Quantum-Resistant Architecture Before the Threat Arrives

Quantum computing is advancing rapidly. Security experts predict that encryption methods protecting data today will become vulnerable within years, not decades. For AI organizations whose training data provides a long-term competitive advantage, waiting until quantum computers reach practical scale poses unacceptable risk.

Organizations with data that requires multi-decade confidentiality, such as financial models, medical research, and proprietary algorithms, need security that remains effective as quantum computing matures. Retrofitting security after quantum computers arrive means potential exposure windows and costly infrastructure overhauls.

The Hitachi + Brocade solution addresses this urgency with a quantum-resistant architecture available now. The integrated platform's advanced cryptographic algorithms are designed specifically to withstand quantum attacks. As quantum-safe standards evolve, the architecture adapts without disruptive infrastructure replacements.

Result: *Organizations secure their AI investments against tomorrow's threats today—eliminating the risk of emergency security retrofits, data exposure during transition periods, or competitive disadvantages from delayed quantum-safe adoption.*

Summary

Single Security Fabric. Complete Protection. Future-Proof Confidence.

Enterprise AI initiatives demand security that protects valuable intellectual property not just today, but for decades to come. Organizations can't afford the policy gaps created by managing separate storage and SAN vendors, nor can they wait until quantum computers arrive to implement quantum-resistant security.

Hitachi VSP One Block, integrated with Brocade Gen 8, delivers quantum-safe security by design. Full-stack protection secures AI data end-to-end. Defense-in-depth, combined with certification and access controls, eliminates vulnerabilities. Unified management simplifies operations while strengthening security posture.

Protect your AI intellectual property and future-proof security investments against quantum threats. With experts predicting that quantum computers will break current encryption within years, the window to deploy quantum-safe architecture is now.

Evaluate your AI security posture and quantum readiness. Get a comprehensive assessment identifying policy gaps, quantum vulnerabilities, and a roadmap for unified quantum-safe infrastructure.

Learn more →

About Hitachi Vantara

Hitachi Vantara is transforming the way data fuels innovation. A wholly owned subsidiary of Hitachi, Ltd., we're the data foundation the world's leading innovators rely on. Through data storage, infrastructure systems, cloud management and digital expertise, we build the foundation for sustainable business growth.

Hitachi Vantara

Corporate Headquarters
2535 Augustine Drive
Santa Clara, CA 95054 USA
hitachivantara.com | community.hitachivantara.com

Contact Information
USA: 1-800-446-0744
Global: 1-858-547-4526
hitachivantara.com/contact

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