

MANUFACTURING DATA SOVEREIGNTY



Unlock trusted collaboration and innovation with data management solutions that enable you to maintain complete control of your data wherever it resides.

In today's manufacturing sector, the next wave of transformation is defined by how organizations trust, share, and govern data, from smart factories and IoT-enabled plants to global supply chains. Imagine a future where manufacturers, suppliers, and partners collaborate seamlessly across borders, confident that their intellectual property, operational data, and process insights remain protected and sovereign.

This isn't a distant vision. It's the new reality demanded by EU and other local regulations, digital product passports, and the rise of data spaces, Manufacturing-X, and standardized digital twins.

The challenge

Manufacturing leaders face a sovereignty, compliance, and innovation crossroads:

- How do you enable secure, trusted data exchange across a globally distributed supply base when only 18% of manufacturers monitor compliance beyond Tier-3 suppliers, and 23% monitor only Tier-1 suppliers? This lack of deep-tier visibility is a structural vulnerability, with 97% of firms reporting quality, cost, or delivery issues due to supply chain complexity.¹
- How do you turn compliance with GDPR, ISO/IEC 62443, the EU Data Act, and the Digital Product Passport into a competitive advantage when 33% of procurement leaders say that regulatory changes are their biggest operational challenge?¹
- How do you scale AI and digital twins, knowing that your data is governed, resilient, and ready for innovation when only 36% of manufacturers feel confident making decisions with their current data, and 44% have seen AI projects fail due to poor data quality?¹

¹ Dun & Bradstreet Manufacturing Pulse Survey 2025

The solution

NetApp empowers manufacturing organizations to build sovereign data ecosystems where collaboration is secure, compliance is streamlined, and innovation accelerates, with key capabilities that include:

- **Governed data spaces:** Enable policy-controlled sharing with partners, aligned with Manufacturing-X so sensitive data stays protected and sovereign.
- **Digital twin enablement:** Support standardized twins (AAS, IEC 63278) and open middleware for IT/OT integration and supply chain transparency.
- **Compliance by design:** Automate privacy, residency, and lifecycle controls for GDPR, ISO/IEC 62443, ISO/IEC 27001, and the EU Data Act requirements.
- **Cyber resilience:** Defend intellectual property and operations with quantum-resistant encryption, AI-driven ransomware protection, and rapid recovery.
- **Operational flexibility:** Manage data across on-prem, cloud, and hybrid environments with no vendor lock-in.

With NetApp® solutions, you can:

- Unlock faster model cycles and trusted supplier collaboration, even as supply chains become more multi-tiered and globally dispersed.
- Reduce downtime and audit risk with audit-ready transparency for evolving EU regulations and ESG requirements (only 24% of manufacturers currently track modern slavery risk in their supply chains).
- Accelerate AI, digital twins, and product passport readiness on governed, resilient data.
- Meet EMEA's strict regulatory requirements with confidence and move from reactive to proactive supply chain resilience.

Safeguard your data with built-in security and trusted data spaces

The sensitive nature of manufacturing data (process data, engineering files, operational metrics, and supplier contracts) makes it a prime target for cyberthreats and industrial espionage. Whether you're accessing data in the boardroom, on the shop floor, or from a remote plant, NetApp delivers the most secure storage foundation for the manufacturing industry.

For maximum protection, NetApp's security capabilities are built into every system, not bolted on as an afterthought.

- **Encryption is the foundation of data security:** Quantum-resistant encryption protects data in flight and at rest. External key management ensures only you hold the keys. If your data is stolen or intercepted, it cannot be accessed or unencrypted, not even by NetApp.

KEY BENEFITS

- Safeguard manufacturing data with built-in security features that include quantum-resistant encryption, AI-driven ransomware protection, and industry-leading certifications.
- Maintain control of data on premises and in the cloud with unified visibility and seamless data movement between environments.
- Keep private data private with automated classification, privacy insights, data lifecycle controls, and multi-provider integration.
- Meet EU and Middle East sovereignty requirements with strict data residency options, local cloud providers, and compliance with regional mandates.
- Be AI-ready with governed, synchronized data pipelines designed for scalable and compliant AI, digital twins, and Manufacturing-X-aligned data spaces.

• **Real-time, AI-driven ransomware protection:** Near-100% detection accuracy and instant, proactive response help prevent successful ransomware attacks. Zero Trust architecture protects data and infrastructure from the inside out. Support for a full spectrum of 3-2-1 backup variations, including replication and efficient disaster recovery, keeps your data safe from corruption, loss, and accidental deletion.

• **Trusted data spaces for secure collaboration:** NetApp enables policy-controlled data spaces that are aligned with Manufacturing-X. This empowers you to share data with partners, suppliers, and ecosystem collaborators with confidence that your IP and sensitive information are protected, governed, and sovereign. Standardized digital twins (AAS, IEC 63278) and open middleware further support secure, interoperable data exchange across IT/OT environments.

• **Top-level security certifications:** NetApp is the safest place to store your data across on-premises and cloud environments, with solutions that are proven to meet the most stringent standards for storing and protecting sensitive manufacturing data. Certifications include Common Criteria (ISO/IEC 15408), FIPS 140-2, ISO/IEC 62443, and ISO/IEC 27001. Our products map to Certification of Origin and Manufacturing (COOM) requirements using detailed supply chain audits, comprehensive quality management systems, and third-party validations.

ALIGNED WITH THE EU SOVEREIGNTY FRAMEWORK

NetApp solutions support the sovereignty dimensions defined by the European Commission, ensuring manufacturers retain full strategic, legal, operational, and technological control over their data across hybrid and multi-partner environments.



Control your data on premises and in the cloud

Manage your data directly, wherever it resides. For the strictest data residency requirements, NetApp supports “dark sites” with no external access. For hybrid data management, NetApp integrates seamlessly with all major cloud providers.

Unified visibility and monitoring tools let you see and govern access, usage, and sharing across your entire data estate. When needed, you can move data securely and seamlessly between cloud and on-premises environments. NetApp applies strict rules to access any telemetry, metadata, and support data, ensuring compliance with EU and Middle East data residency regulations.

Keep private data private

Data privacy is foundational for sovereignty and compliance, whether under GDPR, CCPA, or local Middle East privacy laws. NetApp gives you deep insight into your data: what you have, where it resides, and its associated risks. From creation to archival, NetApp solutions support privacy and compliance across the entire data lifecycle.

Built-in data classification provides out-of-the-box privacy insights, including Privacy Risk Assessments and Data Subject Access Requests (DSARs). Compliance controls prevent unauthorized deletion or alteration of data, even by NetApp or external parties. Seamless integration with multiple providers prevents over-reliance on a single vendor, supporting a more balanced, flexible, and compliant technology ecosystem.

Agentic AI: Proof point for innovation and governance

NetApp’s agentic AI-ready data pipelines (powered by NetApp AFX and the AI Data Engine) deliver governed, fresh, and synchronized data for advanced manufacturing use cases like predictive maintenance, process optimization, and digital twins. This enables manufacturing organizations to scale AI safely and confidently, with full lifecycle governance and compliance.

Leading manufacturers are leveraging NetApp’s agentic data foundation to accelerate AI model cycles, reduce downtime, and unlock new business models, all while maintaining audit-ready evidence for regulators.



Enable European and Middle East sovereignty

NetApp solutions align with and support the goals of greater EU sovereignty and autonomy, as well as Middle East sovereign cloud mandates and national AI strategies. Our on-premises and cloud solutions, led by local providers, meet the strictest regional requirements. NetApp advocates for balanced policies that secure strategic autonomy while providing access to top technologies.

Partner with NetApp for data sovereignty

NetApp empowers you to control and govern your data, infrastructure, and digital operations across cloud and hybrid environments. Our solutions support explainable AI, autonomous systems, and sovereign cloud, all built on Zero Trust and ethical data practices. With industry certifications and deep ecosystem engagement, NetApp accelerates compliance, innovation, and secure collaboration across the value chain.

Unlock the power of trusted manufacturing data

Unlock the full value of trusted, high-performance data across engineering, manufacturing, and your connected ecosystem. See how NetApp helps automotive leaders accelerate development, unlock trusted data sharing, strengthen compliance, and deliver data-driven performance at scale.

→ Learn more about data sovereignty with NetApp.

→ Explore NetApp solutions for manufacturing.

THE NETAPP DIFFERENCE

When it comes to data sovereignty, NetApp steps ahead of the competition with solutions that:

- Deliver the most secure storage on the planet with verifiable trust
- Provide control, autonomy, and operational sovereignty capabilities
- Offer industry-leading technology to protect against any foreign-state regulatory reach that is designed to compromise your data sovereignty
- Give you a sliding scale of sovereignty for a solution that meets your specific needs



Contact Us

About NetApp

NetApp is the intelligent data infrastructure company, combining unified data storage, integrated data services, and CloudOps solutions to turn a world of disruption into opportunity for every customer. NetApp creates silo-free infrastructure, harnessing observability and AI to enable the industry's best data management. As the only enterprise-grade storage service natively embedded in the world's biggest clouds, our data storage delivers seamless flexibility. In addition, our data services create a data advantage through superior cyber resilience, governance, and application agility. Our CloudOps solutions provide continuous optimization of performance and efficiency through observability and AI. No matter the data type, workload, or environment, with NetApp you can transform your data infrastructure to realize your business possibilities. www.netapp.com

