

INTELLIGENT STORAGE FOR SMARTER VIRTUALIZATION



How NetApp A-Series systems optimize virtualized environments with high-speed performance, built-in protection, and hybrid-cloud flexibility.

Virtualization Is Evolving - Is Your Storage Keeping Up?

Virtualization powers the modern enterprise, but it's not without its headaches. As environments scale and diversify, IT teams are hitting real roadblocks:

- **Rising Virtualization Costs:** The virtualization landscape has changed, introducing higher costs and driving new strategies.
- **Performance Pressure:** Mission-critical apps can't afford latency.
- **Data Chaos:** VMs span on-premises and the cloud, creating management complexity.
- **Security Risks:** Ransomware loves virtual environments.
- **Cloud Complexity:** Hybrid strategies demand seamless data mobility.

To stay ahead, organizations require a storage solution that is not only high-performing, scalable, and secure, but also deeply integrated with virtualization platforms and cloud ecosystems.

Meet NetApp A-Series and ONTAP: Built for Virtualization at Scale

Whether you're running unified workloads on AFF A-Series or block-optimized environments on ASA A-Series, NetApp delivers the performance, protection, and cloud integration you need with ONTAP at the core.

Why NetApp A-Series Stands Out

- **One Platform, Any Protocol:** AFF supports SAN, NAS, and object, and ASA is optimized for high-performance SAN.
- **Blazing Fast:** NVMe architecture slashes latency and boosts throughput.
- **Smarter Storage:** Inline efficiencies like deduplication and compression save space and speed up provisioning.
- **Built-In Protection:** SnapMirror, SnapCenter, and SnapLock keep your data safe and compliant.
- **Cloud-Connected:** Native integration with AWS, Azure, and Google Cloud.

Real Solutions to Virtualization's Toughest Problems

Cost control starts at the storage layer:

With VMware's new core-based licensing model, every CPU core counts. NetApp A-Series systems help you cut costs by offloading storage-intensive operations from the hypervisor, reducing CPU overhead. That means you can stretch your infrastructure further, avoid unnecessary hardware upgrades, and keep your budget in check, all without compromising performance. In fact, [Thor Motor Coach](#) reduced infrastructure costs by 30% per year while increasing performance as they replaced their old hardware with NetApp all-flash technologies and virtualized their entire environment with the exception of backup servers.

Performance isn't optional, it's expected:

NetApp delivers with NVMe/FC and NVMe/TCP support across both AFF and ASA systems, ensuring ultra-low latency and high throughput for even the most demanding workloads. Adaptive QoS intelligently prioritizes resources based on workload needs, while FlexGroup volumes scale effortlessly to support massive VDI and VSI environments. Whether you're running thousands of VMs or mission-critical databases, NetApp keeps everything operating fast and smooth.

Management shouldn't be a full-time job:

NetApp's deep integration with VMware vSphere simplifies day-to-day operations. With ONTAP tools for VMware, you can provision storage based on policies, take VM-level snapshots, and automate everything from cloning to QoS, all from within vCenter. And if you're embracing infrastructure as code, NetApp supports automation through REST APIs, Ansible, Terraform, and VMware Aria, giving you full control and flexibility.

Built-in Security and Seamless Disaster Recovery:

NetApp protects your virtual environment with a multilayered defense and disaster recovery strategy:

- The vSphere Metro Storage Cluster (vMSC) solution, powered by SnapMirror active sync, provides business continuity through native HA, with active-active load balancing across sites, without requiring any additional software or licenses.

KEY BENEFITS

- **Lower VMware Infrastructure Costs:** Offload storage and data management operations to reduce vCPU usage and minimize core-based licensing expenses.
- **Consistent, High-Speed Performance:** NVMe-powered architecture and intelligent QoS deliver ultra-low latency and high throughput for even the most demanding virtual workloads.
- **Simplified, Policy-Driven Management:** Deep VMware integration and automation tools streamline provisioning, protection, and performance tuning—right from vCenter.
- **Built-In Ransomware and DR Protection:** AI-driven threat detection, SnapMirror replication, and SnapLock compliance features keep your data safe and your business resilient.
- **Seamless Hybrid Cloud Integration:** Native services across AWS, Azure, and Google Cloud enable smooth data mobility and consistent operations across your hybrid environment.

- NetApp SnapCenter and NetApp Backup and Recovery deliver VM and application-consistent backups, while SnapMirror sync and async enable fast, efficient replication to secondary systems and disaster recovery sites.
- NetApp Disaster Recovery provides DR orchestration at up to 80% lower cost than VMware Live Recovery by licensing only physical used capacity instead of per-VM licensing.
- Autonomous Ransomware Protection (ARP) uses AI to detect and respond to threats in real time and detect data breaches to protect against double-extortion ransom attacks.
- SnapLock enables WORM compliance for your most sensitive or regulated data.

No matter what happens, NetApp secures your data with comprehensive protection, so your data remains accessible.

Hybrid cloud isn't the future, it's now:

NetApp is the only enterprise storage vendor with native services across AWS, Azure, and Google Cloud. Whether you're using Amazon FSx for NetApp ONTAP, Azure NetApp Files, or Google Cloud NetApp Volumes, you get consistent performance and management across environments. Cloud Volumes ONTAP supports hybrid deployments, and FabricPool automatically tiers cold data to object storage, so you can optimize costs without lifting a finger. NetApp allows you to leverage the cloud provider and services you require, when you need them, based on your data needs.

Deep VMware Integration and Beyond

NetApp's two-decade partnership with VMware means you get more than compatibility, you get true integration. ONTAP Tools for VMware vSphere streamline provisioning, monitoring, and protection directly within vCenter. You'll gain granular, VM-level control over storage policies and performance. And when disaster strikes, SnapMirror works seamlessly with VMware Live Recovery to automate failover and recovery workflows, minimizing downtime and disruption.

NetApp also makes it easier to adapt to change. With [NetApp Shift Toolkit](#), organizations can quickly and securely migrate virtual machines to reduce reliance on any individual hypervisor. This gives you the flexibility to explore alternative hypervisors or container-based platforms without being locked into a single vendor. Shift automates the conversion process, preserves VM configurations, and maintains data integrity, so you can modernize your virtualization strategy at your own pace, with minimal risk.

NetApp's virtualization support doesn't stop with VMware. For organizations running Microsoft Hyper-V, NetApp integrates with System Center and SnapManager to simplify backup and recovery. Red Hat OpenShift Virtualization users benefit from unified management of VMs and containers, powered by NetApp's persistent storage solutions. And for those leveraging open-source hypervisors like KVM or Proxmox, NetApp offers full compatibility, delivering enterprise-grade performance and reliability in cost-effective environments.

Why NetApp A-Series Is the Smart Choice for Virtualization

In today's fast-moving virtualization landscape, infrastructure decisions can't be made lightly. You need storage that's not just fast, but intelligent. Not just cloud-ready, but cloud-integrated. Not just secure, but resilient. NetApp's AFF and ASA A-Series systems check every box, delivering the performance, efficiency, and flexibility modern enterprises demand.



Whether you're running VMware, exploring alternative hypervisors, or building a hybrid cloud strategy, NetApp gives you the tools to stay agile and in control. With ONTAP at the core, you get a unified data fabric that spans on-prem and cloud, supports any virtualization platform, and protects your data from edge to core to cloud.

But NetApp doesn't stop at great technology, we help you take the next step with confidence. Through tools like [Data Infrastructure Insights \(DII\)](#), NetApp provides a clear, unified view into your entire IT infrastructure, including VMware, helping you identify optimization opportunities and plan for what's next. From cost savings and performance gains to cloud mobility and ransomware defense, NetApp A-Series systems are purpose-built to power your virtualization journey wherever it leads.

Ready to modernize your virtual infrastructure? NetApp is ready to help. Let's build what's next, together.



Contact Us

About NetApp

For more than three decades, NetApp has helped the world's leading organizations navigate change – from the rise of enterprise storage to the intelligent era defined by data and AI. Today, NetApp is the Intelligent Data Infrastructure company, helping customers turn data into a catalyst for innovation, resilience, and growth. At the heart of that infrastructure is the NetApp data platform – the unified, enterprise-grade, intelligent foundation that connects, protects, and activates data across every cloud, workload, and environment. Built on the proven power of NetApp ONTAP, our leading data management software and OS, and enhanced by automation through the AI Data Engine and AFX, it delivers observability, resilience, and intelligence at scale. Disaggregated by design, the NetApp data platform separates storage, services, and control so enterprises can modernize faster, scale efficiently, and innovate without lock-in. As the only enterprise storage platform natively embedded in the world's largest clouds, it gives organizations the freedom to run any workload anywhere with consistent performance, governance, and protection. With NetApp, data is always ready – ready to defend against threats, ready to power AI, and ready to drive the next breakthrough. That's why the world's most forward-thinking enterprises trust NetApp to turn intelligence into advantage.

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