

Optimize your AWS experience for enterprise workloads



Go from enterprise-grade to enterprise-great

Meet your cloud mandate for hybrid and cloud-native workloads

The problem

The main challenge to cloud adoption is migration of tier 1 workloads. These mission-critical applications require an enterprise-scale architecture to handle high availability and performance demands.

Most organizations struggle to find cloud infrastructure and file services that meet their objectives for data protection, scalability, and resilience.

The solution

NetApp industry-leading block and file storage has multiprotocol support for Windows, Linux, and iSCSI. Our enterprise solutions have the capabilities you need for migrating storage-heavy applications, databases, and DevOps environments to the cloud.

With NetApp® ONTAP®, you can natively run cloud workloads or swiftly lift and shift legacy apps into the AWS Cloud—all at optimized cost. You don't need to refactor code or redesign processes. And you can use ONTAP as a self-directed solution or as a fully managed service.

It's a snap to extend and migrate to AWS, because you're using the familiar file storage workflows, orchestration, and data protection capabilities that you use on premises.

The state of enterprise application migration

68%

of surveyed CIOs ranked public cloud migration or expansion as the top driver of IT spending¹

73%

of on-premises workloads could move to cloud²

59%

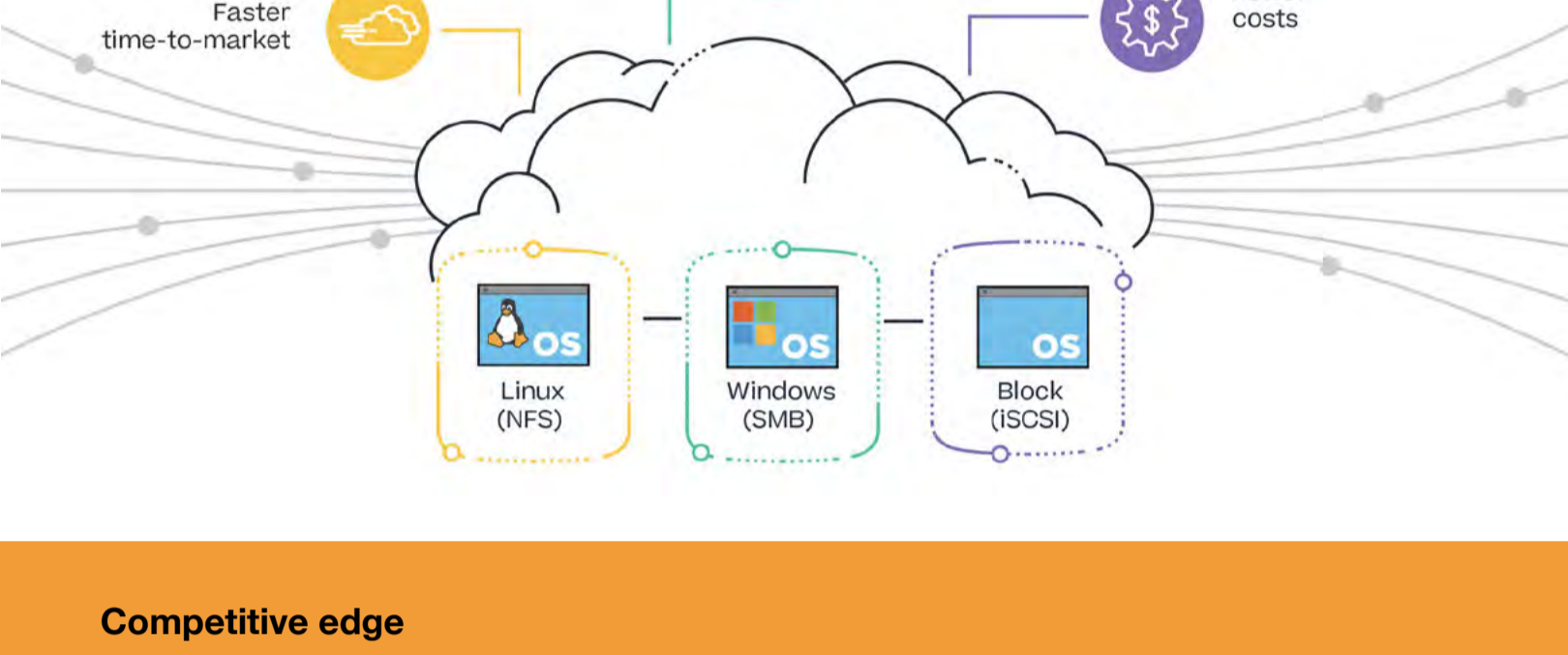
of organizations expect to be mostly cloud-based within the next 18 months³

Five ways NetApp and AWS are better together

- We're the specialists**
Proclaimed market leader by Gartner⁴ and GigaOm⁵ and IDC⁶, NetApp is the choice for block and file storage in hybrid and cloud-first environments.
- NetApp + AWS = enterprise-great**
As partners for over a decade, NetApp and AWS have continued to migrate, build, and manage enterprise-scale Linux, Windows, and iSCSI workloads with ease.
- Continuous optimization**
When you extend mission-critical applications from the premises to AWS, you retain the data efficiencies and optimizations found in the data center—they're readily available on AWS.
- Durability and availability**
You can meet uptime and availability SLAs with simple and fast replication across AWS Availability Zones and get highly durable daily backups that are incremental forever and block based.
- Flexible data management**
NetApp ONTAP enterprise-grade data services combine with the agility and scalability of AWS to provide consistency across the hybrid cloud. You get a unified data experience whether you use the self-directed NetApp Cloud Volumes ONTAP or the native AWS-managed service in Amazon FSx for NetApp ONTAP.

Unlock the best of AWS

Seamlessly create hybrid cloud storage on AWS



Competitive edge

Market leaders NetApp and AWS provide the building blocks that help you achieve a robust, mature, enterprise-great cloud environment

- Support DevOps and application-driven infrastructures**
 - Increase DevTest agility with a cloud-native shared file system to shorten release cycles. Enable persistent data and state from containers and serverless functions like Amazon ECS, Amazon EKS, and AWS Lambda.
 - Enable availability across AWS Availability Zones.
 - Provide DevOps with common storage to organize and share code and files securely.
- Run file shares on AWS**
 - Launch, run, and scale NFS and SMB shared file storage for business apps. Address storage-heavy workloads by connecting to Amazon EC2, Amazon ECS, VMware Cloud on AWS, Amazon WorkSpaces, and Amazon AppStream.
 - Meet the scalability, elasticity, availability, and durability required for enterprises.
 - Migrate storage-heavy apps, ERP, CRM, Microsoft Exchange, and SQL Server, and take advantage of Microsoft Active Directory integration.
- Lift and shift enterprise workloads**
 - Migrate and build enterprise-scale architectures and hybrid cloud workloads. Support software-as-a-service (SaaS) applications with a multiprotocol file system. Optimize cost, time, and latency to streamline your migration without rearchitecting or sacrificing performance and reliability.
 - Automate data replication and failover, simplifying shared storage to host your database.
 - Easily migrate Oracle and SAP HANA workloads to AWS with SAP-certified FSx for ONTAP and store database backups for protection during updates or DevTest.
- Get data protection for cloud workloads**
 - Get 3-2-1 data backup with incremental-forever, block-based backups. Take advantage of built-in storage efficiencies for cloud-based disaster recovery with drag-and-drop simplicity, nondisruptive testing, compliance, security, and data sovereignty features.
 - Protect, repurpose, and easily manage data by using NetApp Snapshot™ copies, rapid copies, and data synchronization.
 - Create data copies on AWS, and then lower disaster recovery costs with cold-storage tiering to Amazon S3.

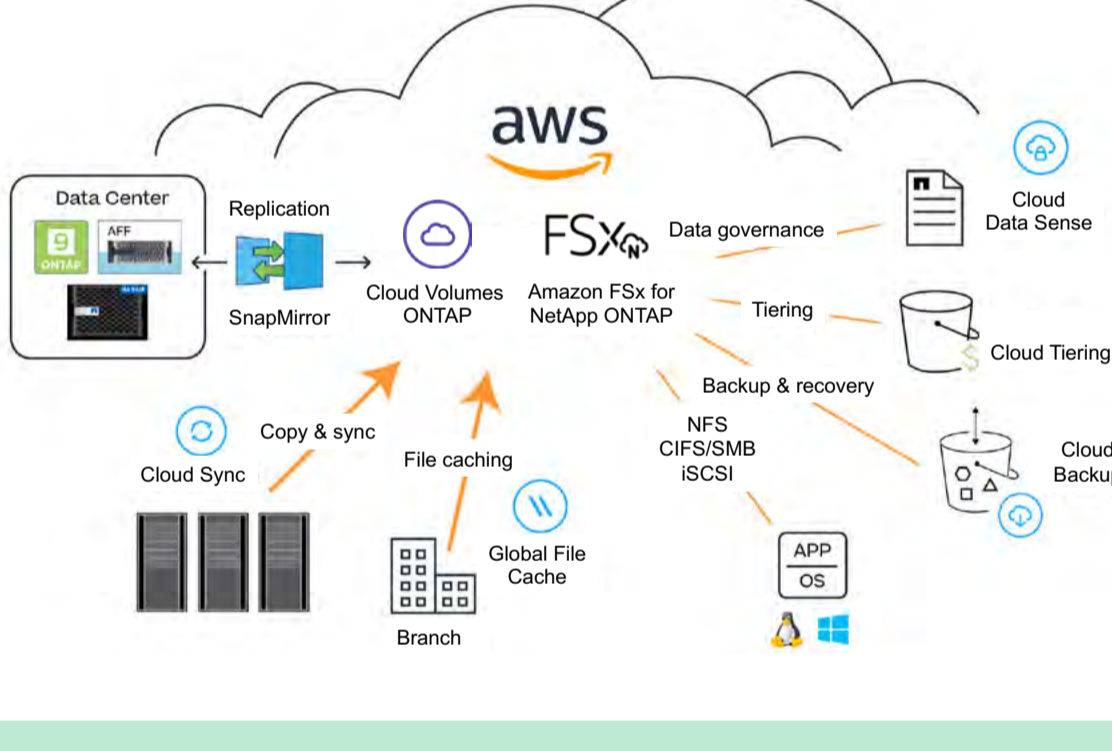
“Because our customers are media and financial institutions, downtime is not an option. NetApp’s highly available storage in AWS provides nonstop operations and business continuity.”

— Lorenzo D.
Lead Infrastructure Engineer, EidosMedia

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Unmatched solutions for your enterprise cloud



Optimize your AWS experience for enterprise-scale apps and meet your cloud mandate for hybrid and cloud-native workloads. Amplify your cloud storage infrastructure and data services through a unified control plane that helps to:

- Simplify:** Deploy, discover, manage, and optimize data and its infrastructure from the comfort of [NetApp BlueXP™](#), a unified control plane delivering a simplified hybrid multicloud experience.
- Protect:** Meet uptime and availability SLAs with automatic [NetApp SnapMirror®](#) replications across AWS Availability Zones and restore instantly with zero-impact NetApp Snapshot copies. Gain durable, incremental-forever, block-based daily backups from [NetApp Cloud Backup](#) service.
- Access:** Extend on-premises data into AWS with SnapMirror or the BlueXP copy and sync service using [NetApp Cloud Sync](#) for aging third-party NAS filers. Reach data from the edge with [NetApp Global File Cache](#), and speed up latency-sensitive on-premises workloads by using [NetApp FlexCache®](#) to burst to AWS.
- Govern:** Use the compliance dashboard with the BlueXP governance service using [NetApp Cloud Data Sense](#) to meet unstructured data standards and adhere to GDPR and other regulations by locating personally identifiable information (PII).
- Monitor:** Take advantage of the BlueXP observability service using [NetApp Cloud Insights](#) to see across the entire infrastructure (on premises to cloud) and identify apps that are poised to migrate to AWS. Then prevent ransomware and other external threats with the NetApp Cloud Secure feature.
- Optimize:** Optimize capacity resources with fully elastic storage tiering with the BlueXP tiering service using [NetApp Cloud Tiering](#) to move cold data to Amazon S3. Scale compute resources to maximize use for up to 90% lower cost with [Spot Ocean](#) by NetApp.

“Using NetApp Cloud Volumes ONTAP from AWS Marketplace, we have achieved recovery times in testing that are almost instantaneous, and with as little as 10 minutes of data loss.”

— Peter Raettig
Head of Technical Operations, Reach plc

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Questions to guide your AWS journey

- Would you like to manage your data with the same set of features, no matter where it's stored?
- Do you have applications “stuck” on premises that you'd like to move to the cloud?
- Would you benefit from a lift and shift of Linux and Windows workloads to AWS that avoids a need to refactor?
- Can you take advantage of storage efficiencies that minimize your storage footprint and maximize your cost savings, while protecting against downtime with high-availability?
- Does the lack of performance or visibility across your hybrid cloud environment keep you from moving more workloads to the cloud?



Licensing: Cloud Volumes ONTAP

Free Edition	Essential	Professional
Deploy Cloud Volumes ONTAP (single node or high availability) from NetApp BlueXP Up to 500GB free of charge Upgrade to more capacity Professional for enterprise capacity Limited support	Deploy Cloud Volumes ONTAP (single node or high availability) from NetApp BlueXP Capacity minimum: 4TB Purchase with the AWS Marketplace or bring your own license (BYOL) Pay monthly or pay in fixed terms with discounts: 1, 2, or 3 years.	Deploy Cloud Volumes ONTAP (single node or high availability) from NetApp BlueXP Capacity minimum: 4TB Purchase with the AWS Marketplace or bring your own license (BYOL) Pay monthly or pay in fixed terms with discounts: 1, 2, or 3 years. Bundles with the BlueXP backup and recovery service using Cloud Backup

Start with NetApp BlueXP a unified control plane delivering a simplified hybrid multicloud experience for storage and data services across on-premises and AWS cloud environments.

[NetApp Cloud Volumes ONTAP pricing](#)

Licensing: Amazon FSx for NetApp ONTAP

With Amazon FSx for NetApp ONTAP, you don't pay for resources that you don't want. You pay only for the resources you use, with no minimum commitments, licensing costs, or up-front fees. You're billed by the second for your FSx for ONTAP file systems, and you're billed monthly for any separately licensed NetApp portfolio services that you've enabled.

[Amazon FSx for NetApp ONTAP pricing](#)

Additional resources

- [Talk to a specialist](#)
- [Cloud Volumes ONTAP overview](#)
- [Cloud Volumes ONTAP Quick Start](#)
- [FSx for ONTAP overview](#)
- [FSx for ONTAP user guide](#)
- [NetApp services portfolio for AWS](#)

Sources:
 1 Deloitte, The cloud migration forecast: Cloudy with a chance of clouds, TMT Predictions 2021
 2 ESG, ESG Master Survey Results, 2019 Technology Spending Intentions Survey, March 2019
 3 IDC, 2020 IDC Cloud Computing Survey
 4 NetApp, NetApp is Recognized as a Magic Quadrant Leader...Again!, September 2019.
 5 GigaOm, GigaOm Radar for Cloud File Systems, September 2021.
 6 NetApp, IDC MarketScape: NetApp a Leader in Scale-Out NAS (File-Based Storage), January 2020