

E-BOOK

Envision the evolving cloud in the U.S. Public Sector

Solving the challenges of the multicloud



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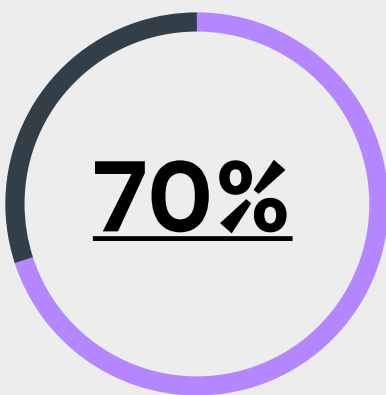
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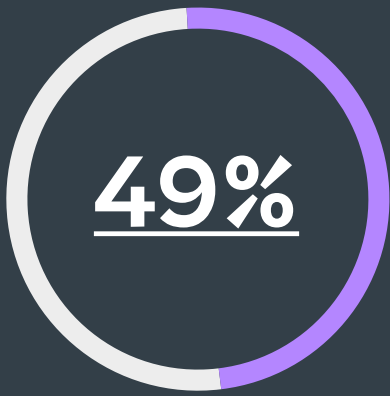
The case for an evolved cloud strategy

The initial wave of disruption caused by the cloud has passed. About half of all U.S. state, local, and federal governments have either some or most of their systems and solutions in the cloud. The COVID-19 pandemic accelerated cloud adoption in the public sector, leaving behind a complex environment of cloud silos across multiple cloud providers that is costly and difficult to manage.

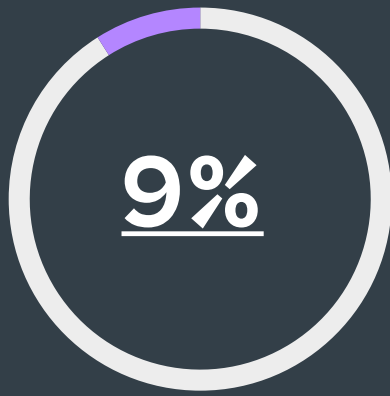
It's time for the next phase of the cloud journey; organizations must optimize their foundations to unlock the true potential of the cloud. The evolved cloud is a strategic approach to hybrid multicloud environments where cloud is fully integrated into your architecture and operations. In the evolved cloud, everything is efficient, secure, and continuously optimized to work for you in a world of constant disruption.



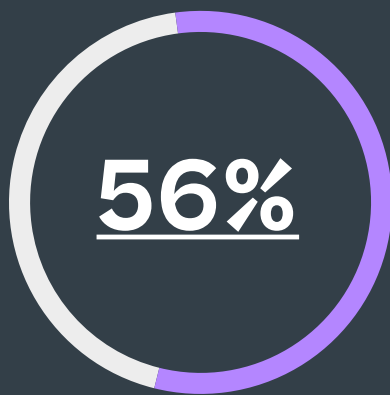
of state and local government executives state that cloud is their preferred environment for hosting citizen and mission data.



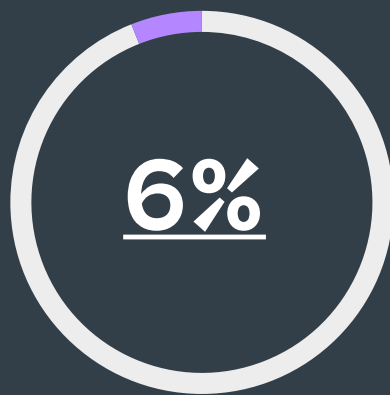
of state and local governments have most of their systems and solutions in the cloud



of state and local governments have all cloud-based solutions



of federal government offices have some (but not all) cloud-based solutions and systems



of federal offices have all cloud-based solutions



Maximize the mission with NetApp and AWS

NetApp and AWS make an evolved cloud possible for government organizations. Amazon FSx for NetApp ONTAP is a native AWS managed service that delivers block and file storage integrated with NetApp's portfolio of enterprise-grade data services.

By bringing together the power of industry leaders in both cloud and storage, we're able to deliver NetApp® ONTAP® as an AWS-native first-party service that is sold, supported, billed, and managed by AWS. Now, for the first time, our customers can access enterprise-grade multiprotocol and operating system technologies from a single managed solution in the cloud.

With FSx for ONTAP, you get enterprise-class storage capabilities directly through your AWS service. You can take advantage of all the functionality of ONTAP on premises and in the AWS cloud with features such as deduplication, compression, thin provisioning, and more. Automatically detect and respond to cyberthreats and protect your data with encryption in flight and at rest, secure replication, and restoration in minutes.

NetApp and AWS

NetApp and AWS have a long history of partnership in providing secure, cost-effective solutions specifically for public sector customers.

- ✓ NetApp was named 2021 AWS ISV Design Partner of the Year (U.S.) for FSx for ONTAP
- ✓ NetApp is an AWS Government ISV Competency Partner for Public Sector
- ✓ NetApp is an AWS Public Sector Partner
- ✓ More than 7,500 government agencies around the world use AWS

Certifications

- ✓ FedRAMP Moderate and High
- ✓ DOD SRG IL2, IL4, and IL5

Leverage one cloud—any protocol

By establishing a central data hub for both hybrid and multicloud data in FSx for ONTAP, you can now have a single managed solution for data orchestration and retention. An evolved cloud architecture with FSx for ONTAP at its core liberates data from private, public, and hosted cloud silos through the power and flexibility of the NetApp BlueXP™ unified control plane.

NetApp BlueXP and FSx for ONTAP enable you to manage your data in any ONTAP system, whether that is in a private cloud on premises or in the AWS Cloud. You can freely move data in the hybrid cloud environment at any time—all while accommodating the highest levels of security and compliance. Avoid lock-in and free your data.

FSx for ONTAP also provides multiprotocol support for file and block, so you can manage and categorize your data in the cloud and easily connect to the AWS portfolio of advanced data services.

Having common data management capabilities at the storage layer also makes moving data and applications between environments seamless, so developers can build where they want and applications can be deployed anywhere. With data in FSx for ONTAP, it's easy to move data into S3 to tap into artificial intelligence, machine learning, and analytics. And you can use the FSx for ONTAP capacity pool tier to enable an unlimited elastic data storage offering for a lot less cost.

Multiprotocol support on premises and in the cloud

- ✓ SMB for Windows
- ✓ NFS for Linux
- ✓ iSCSI for Block

Key workloads for FSx for ONTAP

- ✓ Central data repository
- ✓ Backup
- ✓ Disaster recovery
- ✓ Cross-region replication
- ✓ Archive
- ✓ Burst to the cloud



Close the skills gap

The cloud skills gap is a real barrier to cloud adoption, especially in government organizations that are deeply entrenched in legacy infrastructure and processes. Deloitte warns that “even if government organizations are able to train or attract the talent needed to achieve success in the third era of cloud, they could easily find those workers tempted away by higher salaries or more opportunities in commercial industries.”

NetApp’s approach provides a unified control plane that delivers management consistency across disparate environments with integrated data services, powerful AI-driven automation, flexible consumption models, and integrated data protection.

As the largest storage provider to the U.S. government, NetApp makes it easy to extend your on-premises NetApp environment to FSx for ONTAP and manage it with single-pane-of-glass visibility through our BlueXP control plane.

With BlueXP, you can manage your entire data estate across all on-premises and cloud environments using the same resources to manage both environments. No retraining. No additional headcount required.



More than **90%** of IT leaders plan to expand their modern software engineering and cloud environments.



80% of IT leaders say that inadequate employee skills are holding them back.



48% of technology leaders expected their budget for cloud projects to increase in 2022.



Cloud was the top skill set in demand by IT departments in 2022.

“

The cloud skills gap has reached a crisis level in many organizations. Organizational timelines for cloud adoption, cloud migration and cloud maturity are being impacted by the inability to hire and retain the people with the necessary qualifications.”



Lydia Leong, Gartner



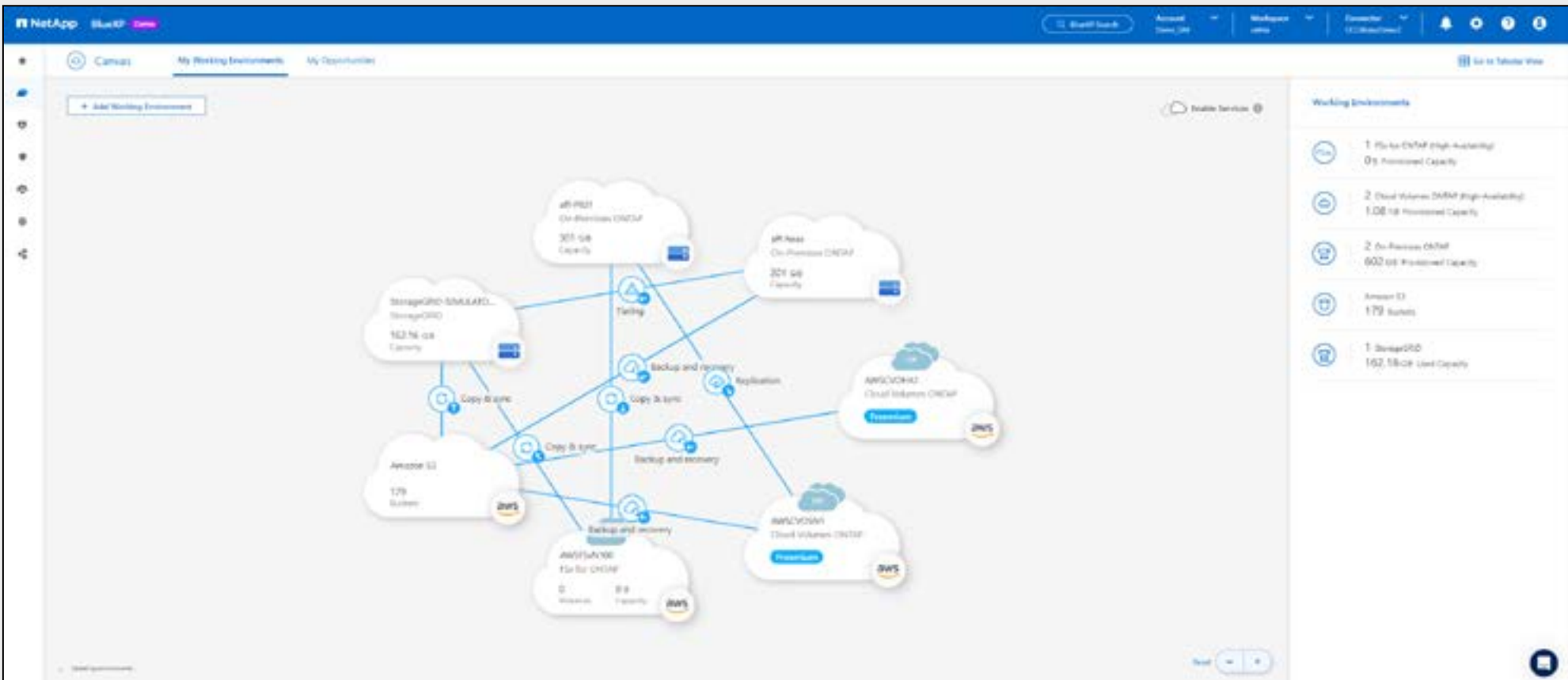
Accelerate migration

Legacy systems and applications, such as those found in many government environments, can make migrating to the cloud more challenging. But NetApp makes it easy by enabling you to move your applications and workloads to the cloud by dragging and dropping them from within the BlueXP control plane.

No other vendor has migrated more workloads from third-party hardware to AWS than NetApp. We can help you with your legacy hardware and infrastructure with a migration path that makes it easier than you ever thought possible.

- ✔ Supports all NFS, SMB/CIFS, object, and cloud-based repositories
- ✔ Mix and match source and target storage format types
- ✔ Transfer data from on premises to on premises, on premises to cloud, and cloud to cloud

Blue XP: Unify hybrid multicloud management



Copy, move, or sync data between a broad range of file and object storage types and locations with a simple drag-and-drop action.

Reduce costs and simplify procurement

Traditional government procurement processes are peak-capacity driven and often take years, wasting valuable time, energy, and resources. Because Amazon FSx for NetApp ONTAP supports multiple protocols—SMB, NFS, and iSCSI—from a single service in AWS, you can tap into the resources you need on demand and avoid tedious procurement cycles.

NetApp also brings the same storage-efficiency and cost-optimization technologies that we're known for on premises to the cloud to counter ballooning cloud storage costs. NetApp uses AI-driven automation for continuous optimization of AWS resources and storage, so your applications get the performance they need, and your data gets stored at the lowest possible cost.

Features such as data tiering let you use the right storage tier based on capacity and throughput so that you can save up to 70% on your monthly cloud bill. Our simplified billing also makes it easy to track and understand your cloud spending.

FSx for ONTAP allows customers to defer their technology choice for storage from the procurement cycle. That's because FSx for ONTAP is an enterprise-class multiprotocol solution that's available on demand.

Save up to **65%** on general purpose workloads with ONTAP storage efficiency features in FSx for ONTAP.



See how much you can save:

[→ Learn more](#)



Calculate your potential savings:

[→ Learn more](#)

Save up to **50%** for storage-heavy VMware workloads in AWS.

Start your cloud evolution today

No matter where you are in your cloud evolution, NetApp and AWS enable you to optimize your environment for every stage in your journey:

- Enable consistent, enterprise-grade security
- Move between clouds with standardized APIs
- Reuse IT skills and generate more value for your organization
- Gain transparency into costs on premises and in the cloud
- Reduce the carbon footprint of IT operations

This is where the evolved cloud can take you. If any of this resonates with you, we'd love to have a conversation about how NetApp can help.

Learn more

- [Evolved cloud: A better hybrid multicloud world](#)
- [NetApp BlueXP](#)
- [Amazon FSx for NetApp ONTAP](#)
- [NetApp cyber resilience for AWS](#)



About NetApp

In a world full of generalists, NetApp is a specialist. We're focused on one thing, helping your business get the most out of your data. NetApp brings the enterprise-grade data services you rely on into the cloud, and the simple flexibility of cloud into the data center. Our industry-leading solutions work across diverse customer environments and the world's biggest public clouds.

As a cloud-led, data-centric software company, only NetApp can help build your unique data fabric, simplify and connect your cloud, and securely deliver the right data, services, and applications to the right people—anytime, anywhere.



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