

## CASE STUDY:

# Mount Sinai Increases Reliability and Performance With NetApp Hybrid Cloud

Mount Sinai is an integrated healthcare system serving the New York City metropolitan area, with eight hospital campuses and a large, regional ambulatory footprint. The health system is designed to increase efficiencies and economies of scale, improve quality of care and patient outcomes, and expand access to advanced primary, specialty, and ambulatory care services throughout the entire clinical network. Internationally acclaimed for their excellence in patient care, research, and education, Mount Sinai employs over 42,000 people at over 400 community locations, including more than 7,200 physicians and 13 free-standing, joint-venture centers.

## THE BUSINESS CHALLENGE

Melvin Pena is the Associate Director of Technology at Mount Sinai Health System. He's responsible for storage, backup, and data management across the entire Mount Sinai ecosystem. As a major healthcare provider in one of the largest metropolitan areas in the world, Mount Sinai can't afford any downtime. Mount Sinai previously employed the use of cloud services, but they experienced latency, performance, and data access issues, which is unacceptable across a healthcare system this robust. Mount Sinai must be available 24/7/365 to serve patients, and when patients arrive, their data must be immediately accessible to provide the best patient care.

Mount Sinai is also continuously expanding, adding more clinical sites to its' footprint. High-performance solutions were needed to keep up with their rate of growth and the increased number of patients. They also needed new standardizations on how to ease the onboarding process of new acquisitions into the Mount Sinai ecosystem.

Security was a concern, and Mount Sinai wanted to address encryption challenges to ensure they had a robust solution for protecting patient information and reinforcing HIPAA compliance, as well as address the increasing global threats in cybersecurity. They also needed backup services to protect from power hits and failures.

Despite latency issues with a previous cloud services provider, Mount Sinai knew they needed to utilize new cloud capabilities that could adapt to changing cloud environments and on-premises functions. As such, they needed a cloud services provider that could improve uptime to 99.9%, move data closer to end users in a secure and highly performed fashion, and offer managed services assistance.

## THE SOLUTION

### NetApp Hybrid Cloud

With the NetApp Hybrid Cloud, organizations can utilize a robust hybrid cloud infrastructure to unify data between data centers and their choice of cloud environments. NetApp provides a lower-cost, Cloud Volume ONTAP data management software solution for ease of moving data and workloads wherever they are needed throughout the entire ecosystem of the organization. Additionally, the NetApp Hybrid cloud includes Keystone, which allows organizations to tap into storage as a service.



**Customer:** Mount Sinai Health System  
**Headquarters:** New York, NY  
**Industry:** Healthcare

## THE BUSINESS CHALLENGE

- Adapting to ever-changing Cloud capabilities
- Increasing cybersecurity global threats
- Inadequate performance and data accessibility
- Need to improve Cloud Provider uptime to 99.9%
- Reinforce HIPAA compliance
- Standardization to ease the acquisitions onboarding

## THE SOLUTION

- NetApp Hybrid Cloud
- NetApp Backup and Disaster Recovery
- NetApp All-Flash Array

## THE RESULT

- Improved performance and minimized downtime
- Higher reliability and availability
- Ability to move data to any cloud
- Reduced latency to milliseconds
- Faster recovery times
- Successful failover strategy
- Replication
- Support extended to 5 years

## NetApp Backup and Recovery

NetApp Backup and Recovery leverages NetApp replication and encryption to store and protect an organization's most sensitive data. Data protection is a key foundation in how NetApp manages data, offering solutions to thwart cybersecurity and ransomware attacks across the hybrid cloud. Features include failover exercises and effective business continuity planning to help avoid or limit downtime. NetApp Backup and Recovery also provides effective disaster recovery capabilities and cloud backup to help ensure data is not lost or compromised.

## NetApp All-Flash Array

As a robust scale-out platform built for virtualized environments, NetApp All-Flash Storage Arrays feature best-in-class data management, integrated data protection, and multiprotocol support. These arrays boost primary data for better performance and reduce latency to just milliseconds.

## THE RESULT

From the start, Mount Sinai witnessed great improvement in latency issues. Mainline worked proactively with Mount Sinai to design and architect their storage solutions and identify which workloads were suited to a true hybrid cloud solution versus a native cloud.

The storage arrays delivered as planned, eliminating the latency issues that plagued Mount Sinai in the past, providing quick access to patient information and the delivery of reports between the various medical entities that comprise their healthcare system. Departments across the board experienced better performance, minimized downtime, and higher reliability and availability. Mainline even provided step-by-step diagrams for management and CIOs to keep them up to speed with the technical changes to Mount Sinai's ecosystem.

For data protection and recovery, Mount Sinai achieved faster recovery times that went hand-in-hand with data replication measures and a successful failover strategy. As Pena added, "We made a seamless switchover during an outage with NetApp systems. We had a major power issue and NetApp systems took a minimal amount of time to recover due to their resiliency."

The successful partnership between Mainline and Mount Sinai continues with ongoing projects that include AI automation, business continuity, and new workloads for the cloud. Additionally, support from Mainline has been extended for another 5 years. Pena states, "We have a strong relationship that keeps growing, and we continue to work on more projects. I have absolutely no complaints, only positives, about our relationship with Mainline."

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