

Real Disaster Recovery in Digital Health

Backing Up is Easy, Recovery is Hard

INTRODUCTION

In today's digital healthcare landscape, ensuring the continuity and security of patient data is paramount. Disruptions from cyber-attacks, natural disasters, or system failures can severely impact patient care and hospital operations. Leveraging cloud technology through collaborations with AWS and AMD, healthcare organizations can achieve outstanding disaster recovery capabilities, enhancing data protection, rapid recovery, and operational resilience.

The Importance of Disaster Recovery in Healthcare

Healthcare institutions manage extensive sensitive patient information and rely heavily on complex IT systems. Robust disaster recovery solutions are essential to:



Minimize Downtime

Maintain healthcare services with minimal interruptions.



Protect Patient Data

Safeguard sensitive information against breaches.



Ensure Compliance

Meet healthcare regulations mandating data protection and continuity of care.

KEY COMPONENTS OF AN EFFECTIVE DISASTER RECOVERY SOLUTION

Fast Recovery Times (RTO/RPO)

Recovery Time Objective (RTO): Quickly restore systems to minimize downtime.

Recovery Point Objective (RPO): Ensure minimal data loss during recovery.

Enhanced Security

Built-In Chip-Level Security: Utilizing AMD processors with built-in security features provides an added layer of protection against cyber threats, such as ransomware.

Cloud Read-Only Option: AWS offers cloud read-only versions of critical data, providing a safeguard against data manipulation during cyber-attacks.

Cost-effective and Scalable Solutions

Drive Lower Data Center Costs: Transitioning to cloud-based disaster recovery with AMD and AWS can reduce the need for extensive on-premises infrastructure, helping lower costs. AWS EC2 instances powered by 4th Gen AMD EPYC™ processors offer up to 50% higher performance compared to previous generations, which helps to optimize resource usage and reduce the total cost of ownership (TCO).

Scalability: Easily scale disaster recovery resources based on organizational needs, helping to ensure cost efficiency.

Data Integrity and Compliance

Regulatory Compliance: Enable data integrity and compliance with healthcare regulations through secure cloud storage and recovery processes. AWS provides over 130 HIPAA-eligible services and is HITRUST-certified, enabling healthcare organizations to confidently operate in the cloud while maintaining compliance with regulatory requirements. Additionally, AMD EPYC processors enhance security with features such as AMD Infinity Guard, which provides a comprehensive suite of security capabilities to help protect sensitive patient data.

Comprehensive Backup: Regular backups and secure storage help to ensure data availability and integrity.



Strategic Benefits of Cloud-Based Disaster Recovery with AMD on AWS

Expertise in Healthcare IT

AMD and AWS provide expertise in healthcare security and cybersecurity, ensuring HIPAA compliance and advanced data protection. AWS, leveraging AMD EPYC processors, offers solutions that <u>support electronic health records (EHR) interoperability, improve performance, and promote modernization</u>.

Proven Success and Reliability

AMD and AWS provide robust cloud solutions not only for healthcare but also for industries such as media and financial services. These industries leverage AMD EPYC processors on AWS for high-performance computing and scalability, helping reduce costs and improve efficiency. Additionally, each industry uses these solutions for robust security, high-throughput processing, enabling data integrity and compliance. <u>Healthcare organizations</u>, specifically, benefit from AMD EPYC processors' excellent performance and <u>AWS's secure</u>, <u>scalable infrastructure</u> which offer reliable disaster recovery and operational continuity.

Comprehensive Support

From planning to implementation, AMD on AWS provides end-to-end support, helping to ensure a frictionless transition to cloud-based disaster recovery solutions.

- Challenge: Data Security and Compliance
 - Solution: AWS offers over <u>130 HIPAA-eligible services and HITRUST certification</u>, ensuring healthcare organizations can operate securely and maintain compliance with regulatory requirements.
- Challenge: Integration and Interoperability
 - Solution: AMD EPYC processors on AWS support <u>seamless integration and interoperability</u> with existing healthcare systems, enabling smooth transitions without disrupting operations.
- Challenge: Downtime and Service Disruption
 - Solution: AWS's scalable infrastructure and reliable AMD performance <u>minimize downtime</u> <u>during transitions</u>. AWS provides tools for monitoring and managing workloads to ensure continuous operation during migration.
- Challenge: Cost Management
 - Solution: AMD and AWS offer cost-effective solutions that help reduce long-term expenses.
 <u>AWS EC2 instances with AMD processors provide better price performance compared to M5a instances</u>, allowing healthcare organizations to optimize resources and manage costs efficiently.

Implementing cloud-based disaster recovery solutions with AMD on AWS enhances healthcare organizations' resilience. These solutions enable organizations to defend critical patient data, meet compliance requirements, and maintain operational continuity. With expertise in healthcare security, seamless integration, and minimal downtime during transitions, AMD and AWS make disaster recovery real. Their cost-effective solutions, advanced technologies, and comprehensive support enable healthcare institutions to confidently face today's digital landscape, providing better care and maintaining trust.

2024 Advanced Micro Devices, Inc. All rights reserved. AMD, the AMD Arrow logo, EPYC, and combinations thereof are trademarks of Advanced Micro Devices, Inc. Amazon Web Services is a trademark of Amazon.com, Inc. or its affiliates in the United States and/or other countries.

Amazon EC2 is a trademark of Amazon.com, Inc. or its affiliates. Other product names used in this publication are for identification purposes only and may be trademarks of their respective owners.

