



MailHippo Protects Email Encryption Application on SQL Server with SIOS DataKeeper Cluster Edition

SIOS Chosen for its Cost-effectiveness and Application-agnostic Design

“SIOS DataKeeper saved us from becoming non-operational.” - Chris Almond, CEO, MailHippo



Secure information transmission is essential to today's healthcare providers. From accessing patient test results and medical images to sharing doctor's notes and health records, quality healthcare requires the ability to manage and transmit health information securely and efficiently. However, many organizations face the challenges of doing so while complying with the Health Insurance Portability and Accountability Act (HIPAA), which requires them to ensure confidentiality, integrity and security of any electronically stored, protected health information (known as "ePHI"). MailHippo (<https://www.MailHippo.com>) is an innovative company that enables healthcare providers to send and receive encrypted HIPAA-compliant emails and to collect medical data using HIPAA compliant Web forms. When MailHippo needed a way to protect their critical secure email platform from downtime and disasters, they turned to SIOS Technology.

The Environment

The company's business-critical encrypted email platform runs on SQL Server 2016 instances in two

geographically separated, on-premises data centers.

The Challenge: Cost-effective High Availability for SQL Server

MailHippo needed a robust high availability and disaster recovery (HA/DR) solution to protect the SQL Server database that their mission-critical applications run on. "Our medical provider customers expect their HIPAA compliant email to be available 24/7," said Chris Almond, CEO, MailHippo. "Their information is essential to their ability to provide vital health services to their patients."

The company considered using Windows Server Failover Clustering (WSFC) and SQL Server Enterprise Edition with Always On Availability Groups to add HA protection. However, they did not want the cost and complexity of purchasing and managing the shared storage required by this solution, which would also introduce the risk of a single point of failure. "We needed an affordable, reliable solution that would allow us to use SQL Server Standard Edition," said Almond.

They also wanted to leverage their two on-premises data centers running across different geographic regions to provide disaster recovery protection.

The Solution: SANless High Availability & Disaster Recovery

After rigorous research of HA/DR products, MailHippo decided to build a two-node cluster using SQL Server Standard Edition Always On Failover clustering in one data center and a third node in their second data center for disaster recovery. By simply adding SIOS DataKeeper Cluster Edition to their WSFC, the company could replicate local storage on the primary cluster node synchronously to the second node and asynchronously to the third node.

With this cluster configuration, if a SQL Server failure on the primary cluster node is detected, operation is automatically moved to the secondary node and operation continues. Since DataKeeper synchronizes local storage on both primary and secondary nodes, operation can continue with an RPO of zero. In the event of a site-wide disaster, operation can be switched to the DR site.

“The tight integration with WSFC was one of the key

reasons we chose SIOS,” said Almond. “We used WSFC to create the clusters for our SQL Server environment just like a traditional cluster, and we simply added SIOS DataKeeper Cluster Edition. This lets us use local storage without the need for a costly SAN.”

SIOS software uses performance-optimized host-based, block-level replication to synchronize local storage on the primary and standby nodes in the cluster, creating storage that appears to the WSFC as a SAN.

The Results: Fast & Reliable Failover

MailHippo has been using SIOS SANless clusters and achieving high availability and disaster protection. By using SANless clusters, MailHippo also eliminated the single point of failure risk of a shared storage cluster. “SIOS DataKeeper is a great fit for a rapidly growing company like ours. It’s easy to use, cost-efficient and most of all, reliable,” added Almond.

The SIOS system was put to the test in a recent downtime incident. “We lost our primary SQL Server when both power supplies failed,” said Almond. “But thanks to SIOS, we were able to get the platform back online quickly. Without DataKeeper, we would have required many hours and a mountain of manual work to recover everything. SIOS DataKeeper saved us from becoming non-operational.”

About SIOS Technology Corp.

SIOS delivers innovative software solutions that provide application high availability and disaster protection for Windows and Linux environments. SIOS clustering software provides the flexibility to build clusters to protect your choice of Windows or Linux environment – and any configuration (or combination) of physical, virtual and cloud (public, private, and hybrid) storage – without sacrificing performance or availability. Founded in 1999, SIOS Technology Corp., is headquartered in San Mateo, California, and has offices throughout the United States, and in the United Kingdom, Germany, and Japan.



us.sios.com
@SIOSTech | +1.650.645.7000

© 2023 SIOS Technology Corp. All rights reserved. SIOS, SIOS Technology, SIOS DataKeeper, SIOS LifeKeeper, SIOS Protection Suite and associated logos are registered trademarks or trademarks of SIOS Technology Corp. and/or its affiliates in the United States and/or other countries. All other trademarks are the property of their respective owners.