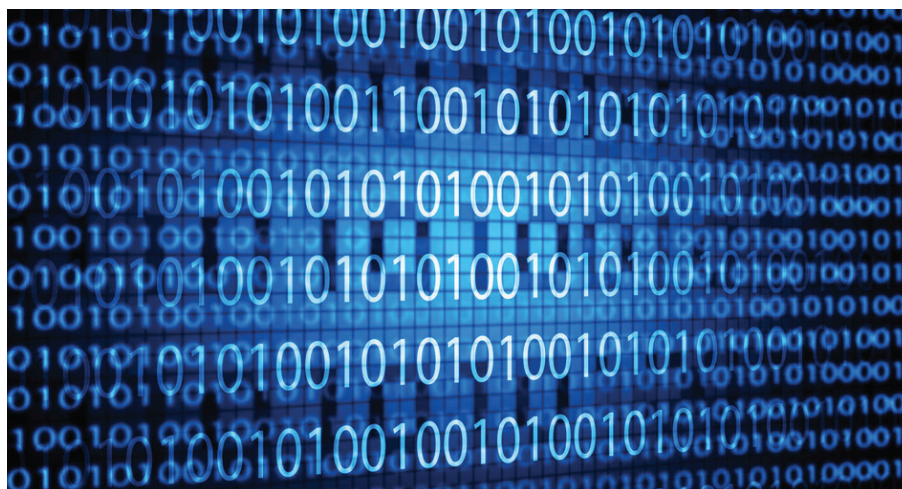# Healthcare Information Services Provider Improves Performance, Cuts Bandwidth Requirements

SIOS DataKeeper Cluster Edition Delivers High Availability Protection, Configuration Flexibility, Bandwidth Efficiency

SIOS DataKeeper Cluster Edition eliminated bandwidth issues, improved data protection, and significantly reduced downtime in a critical healthcare network environment.

A leading healthcare information services provider serves more than 10,000 healthcare organizations across the United States. They rely on their SQL Server databases to deliver a wide range of services including revenue management, patient self-service, and patient care management systems.

The Environment

The company has more than 20 SQL Server clusters located in two geographically separated data centers for primary data support and disaster recovery. They also have smaller servers in their network, as well as SQL Server log shipping for disaster recovery.

Because of this vast customer base and IT infrastructure, the company needed a secure, reliable solution that could efficiently handle heavy network traffic, limit the amount of data at risk, and reduce downtime.

The Challenge

Replication to the company's disaster recovery site flooded bandwidth, which reduced reliability across the entire network. A reliable network is critical for maintaining and processing patient and billing data for the company's hospital and healthcare provider clients.

The company also needed a reliable, efficient high-availability solution to improve their recovery point objective (RPO), meaning that they need to significantly limit the amount of data at risk. RPO is determined by the amount of time between data protection events and how much data could be lost during a disaster recovery.

The company sought to improve the recovery time objective (RTO), which is the maximum length of downtime that can be tolerated after a disaster or failure.

SIOS

The Solution

The company chose SIOS DataKeeper Cluster Edition, but before they deployed it, they ran a proof-of-concept (POC) to ensure it would provide the required functionality. The POC was a stress test on both sides of the network, using very large simulated data files. Throughout the test, the IT staff watched SQL Server failover successfully and resume mirroring in a high change rate environment.

Adding Unparalleled Configuration Flexibility

SIOS DataKeeper Cluster Edition software provides efficient host-based, block-level replication to synchronize storage on the SAN with local storage in their DR site. It adds the configuration flexibility to create a Windows Server Failover Clustering environment using your choice of SAN-based, SANless, or hybrid storage.

After SIOS DataKeeper Cluster Edition passed the company's stringent POC testing, they deployed it into their production environment. They created a three-node cluster, comprising two SAN-based nodes in their primary, on-premises data center and one SANless node in their remote disaster recovery site.

The Results

SIOS DataKeeper Cluster Edition synchronized replication among all three nodes in the cluster and eliminated the bandwidth issue at the disaster recovery site. The company saw substantial improvement in both recovery point and recovery time objectives and reduced the cost of bandwidth.

The company now uses SIOS DataKeeper to protect their important SQL Server in more than 18 cluster nodes.

About SIOS Technology Corp.

SIOS Technology Corp. high availability and disaster recovery solutions ensure availability and eliminate data loss for critical Windows and Linux applications operating across physical, virtual, cloud, and hybrid cloud environments.

SIOS clustering software is essential for any IT infrastructure with applications requiring a high degree of resiliency, ensuring uptime without sacrificing performance or data - protecting businesses from local failures and regional outages, planned and unplanned. Founded in 1999, SIOS Technology Corp. (https://us.sios.com) is headquartered in San Mateo, California, with offices worldwide.

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