

Success Story

Gateway Health Plan Attains Business Continuity with NetApp Professional Services





KEY HIGHLIGHTS

Industry Healthcare

The Challenge

Support fast-growing health plan business with uninterrupted membership services, even during a disaster.

The Solution

NetApp Professional Services (PS) helped build a storagesolution that delivers business continuity through a redundant architecture and virtualization.

Benefits

- Enabled failover resulting in nearly continuous operations during disasters
- Slashed recovery time objective (RTO) by more than 98%
- Saved millions in networking, hardware, utilities, and staffing costs to save money and increase funds available for investment in member services

Customer Profile

Gateway Health Plan (Gateway) was established in 1992 as an alternative to Pennsylvania's Department of Public Welfare's Medical Assistance Program. Gateway now serves more than 250,000 members in Pennsylvania and Ohio and is rated among the best Medicaid health plans in the country.

The Challenge

As word spread about Gateway Health Plan's programs, the company grew to over \$1.2 billion in annual revenue, expanded into new regions, and implemented new services. This success, however, led to runaway growth in Gateway's document processing and storage requirements.

In addition, individual medical emergencies and wider-reaching disasters can strike at any time. When they do, Gateway must be ready to help its members by immediately accessing the data, forms, and applications that detail patient history, document treatments and authorizations, and track payment and billing activity.

Several years ago, to improve access to this extensive Medicare and Medicaid data and documentation and to comply with HIPAA requirements for patient privacy and record keeping, Gateway made the transition from paper to electronic documents, workflows, and storage.

"Going paperless was a key first step, but we needed to go further—to store electronic documents so that they would be accessible at all times, even in the event of a major system failure or a disaster," says David Guilinger, director of Information Services at Gateway.

Gateway's EMC storage system couldn't meet the company's growing storage need or its business continuity requirements. "We could only get a 72-hour recovery time objective, which meant we could be without systems for three days. And the best recovery point objective it could provide was 24 hours, meaning we might lose an entire day's work," says Guilinger. "For us, true business continuity is more than getting systems back online—it's staying responsive to our members, no matter what."

Gateway evaluated business continuity solutions proposed by both NetApp and EMC. "NetApp and its Professional

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David Guilinger

Director of Information Services, Gateway Health Plan

Services team understood our requirements best," says Guilinger. "We were confident we could benefit from their experience and the best practices their experts have established from dozens of implementations."

The Solution

Three NetApp Professional Services experts worked with Gateway engineers as a team for two months to design and implement the new primary and disaster recovery (DR) storage systems. Throughout the project, the NetApp PS team also provided Gateway's IT team with documentation and training in each of the system's processes. "NetApp PS staff was always available, and committed to helping my engineers become fully self-sufficient," says Guilinger.

Delivering data to applications no matter what

The team designed the system so that if individual servers or an entire data center are unable to function, application processing and access to storage can continue, without interruption, on another server or at the other data center.

Two data centers at different sites in Pennsylvania store all of Gateway's data. NetApp SnapManager® with Snapshot™ technology instantly backs up Gateway's data, particularly those stored on the Oracle® and SQL Server® databases, so it's available in minutes,

without requiring staff to spend time on backups. Snapshot technology. FlexClone® copies, and SnapMirror® replication across sites keep the sites in sync with hourly updates. Both the primary data center and the DR facility store 40TB on FAS3020 and FAS3040 storage systems for access by the company's Oracle and SQL Server databases, OnBase content management system, Cognos business intelligence applications, Microsoft® Exchange, and Microsoft Office applications. Even in a disaster, Gateway can continue to respond to requests for information, process documentation as it comes in, automatically authorize procedures and payments as appropriate, and proactively follow up on members who need preventative care.

Providing virtualization expertise

One of NetApp PS's best practices for business continuity is virtualization. NetApp PS experts drew on their previous VMware® experience to help Gateway build a solution that virtualized 90% of its servers and all of its production database environments. Simultaneously, NetApp PS helped deploy NetApp hardware and software alongside VMware products in a single extended project to help provide business continuity and ease of storage administration across the virtualized systems.

This approach enabled Gateway to achieve redundancy by distributing and deploying more instances of its database and application environments—without the expense of additional hardware or software licenses. "I wouldn't have done it any other way," says Guilinger. "NetApp PS staff was doing double duty to ensure a well-integrated deployment. Their expertise with VMware was invaluable in helping us build a system that works with whatever physical device or virtual machine is hosting the application or data."

Business Benefits

Simplification and cost reduction through standardization and virtualization

With help from NetApp PS, Gateway implemented its NetApp® solution within six months. "Now we can continue to serve our members during disasters," says Guilinger. "If our primary data center is out of commission, we can simply fire up a NetApp FlexClone copy as our production system and run it on NetApp hardware at our secondary data center." The new system reduced the recovery time objective by more than 98%—from 72 hours to 1 hour—and its recovery point objective (RPO) from 24 hours to 1 hour.

"If we'd had to invest in physical hardware to provide continuity and achieve this decrease in RTOs and RPOs, it would have cost us millions more in

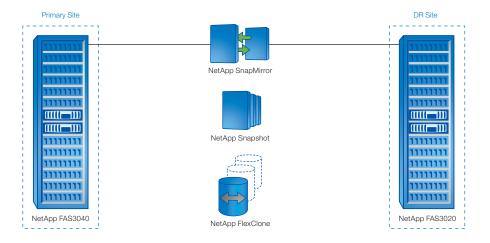


Figure 1) Gateway Health Plan storage infrastructure.

hardware, space, and power, and at least 20% more in staffing costs to manage those additional machines," says Guilinger.

Instead, by adopting NetApp PS's virtualization best practices, Gateway has reduced the number of its physical servers by two-thirds, from 35 to 12. Another NetApp PS best practice is to use the lowest-cost protocol whenever possible. NetApp PS helped Gateway switch from its complex Fibre Channel environment to iSCSI, saving at least \$500,000 annually.

Leveraging all NetApp has to offer

"Having NetApp PS set up our system and transfer knowledge to our staff has more than paid for itself," says Guilinger. "Our NetApp solution is so easy to manage and back up that we've increased storage from 20TB on EMC to 80TB across two NetApp systems, without needing more personnel. As we continue to fine-tune our solution, we continue to work with NetApp PS, because we know they'll help us get the most from our investment."

For Gateway's members, the NetApp PS-designed NetApp system means that they can continue to receive award-winning service, no matter what. And for Gateway, continued partnership with NetApp PS means that, no matter how quickly membership grows, Gateway can continue to deliver the innovative and responsive services that have already made it a leader in its industry.

SOLUTION COMPONENTS

NetApp Products

FAS3020 storage system

FAS3040 storage system

SnapManager for Microsoft

Exchange

Single Mailbox Recovery

SnapManager for Microsoft SQL

Server

Snapshot

SnapMirror

RAID-DP®

FlexClone

Operations Manager

NetApp Global Services

Disaster Recovery Design

& Implementation

Virtualization Solution Suite

Managed Services On-Site

NetApp SupportEdge Premium

NetApp University Training

Protocol

iSCSI

Third-Party Products

Microsoft Windows® Server 2003

Microsoft SQL Server 2000 and 2005

Microsoft Exchange Server 2003

Oracle9i[™]

Symantec™ NetBackup™

VMware ESX

Hyland OnBase enterprise content management software

management software

Environment

Applications: Microsoft Exchange Server 2003, OnBase, custom

business applications

Database: Microsoft SQL Server

2000 and 2005, Oracle9i

Server platform: Dell servers running

virtualized images of Microsoft

Windows Server 2003



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