

INDUSTRY:

Healthcare

LOCATION:

Springfield, Massachusetts

BUSINESS CHALLENGE:

- Design and implement HIPAA-compliant disaster recovery solution
- Provide geodiversity with a data center away from the healthcare systems' Springfield, MA location
- Meet aggressive RPO/RTO requirements
- Comply with HIPAA
- Fit within budget constraints for new hardware

US SIGNAL SOLUTION:

- Disaster Recovery as a Service (DRaaS)
- Michigan-based data center for use as additional DR site

BUSINESS RESULTS:

- Reduced capital expenses
- Elimination of need for IT staffing to manage DR operations
- HIPAA compliant to help mitigate possibility of non-compliance penalties or data breach
- Meets RPO/RTO requirements for minimal impact to patients

**B A Y S T A T E
H E A L T H**

With over 12,000 employees, Baystate Health is one of the largest health systems in New England. The organization relies on efficient, uninterrupted IT operations to serve over 1,000,000 people throughout western Massachusetts every year.

OVER THE LAST FOUR YEARS,

Baystate Health has worked with its primary infrastructure consultant VertitechIT (VIT) of Holyoke, Massachusetts to implement a three-node, active-active-active network design with data center operations located near its Springfield, Massachusetts location. This solution utilizes software-defined methodologies to provide synchronous replication and protection against certain planned and unplanned outages.

Back up and high availability are inherent in the design, but architects recognized the need for geodiversity in its DR plan. If a catastrophic event such as a natural disaster were to occur, Baystate Health would not be able to recover essential applications and data — which could have a significant impact on patient care delivery. Complicating matters were HIPAA compliance requirements for aggressive security protocols and guaranteed SLAs for uptime. The healthcare system also needed a solution that could have it up and running within two hours of any outage or disaster.

**B U S I N E S S
C H A L L E N G E**



THE US SIGNAL SOLUTION

US Signal's disaster recovery-as-a-service (DRaaS) met Baystate Health requirements. It provides fully managed data protection with near continuous block-level replication for proven RPOs of seconds and RTOs of minutes.

By eliminating snapshots, the solution reduces application performance to zero by eliminating snapshots. Built-in data compression reduces bandwidth requirements for initial data sync and ongoing replication. Automated failover testing can be conducted without affecting the production environment.

Built to HIPAA standards, US Signal's DRaaS also includes a fully executed DR playbook, monthly health checks to stay on top of the aggressive RPO and RTO SLAs, and two annual managed DR tests to ensure everything works as planned.

US Signal was also able to provide a fourth data center site in Michigan, giving Baystate Health further geodiversity in the event of a catastrophic failure.

BUSINESS RESULTS

The DRaaS solution provides an important safety net for Baystate Health, supplementing its SDDC project. Because it didn't require additional hardware and licensing costs, the solution has lowered its capital expenses. As a managed solution that includes two full DR tests each year and fully managed playbook, US Signal's DRaaS also frees up the Baystate Health IT team to focus on its core business rather than worrying about BC/DR.

One of the most important benefits of the solution, however, goes far beyond monetary considerations. Results of an automated failover test have demonstrated that Baystate Health systems can be back up and running within 11 minutes — far below the two-hour window the organization required. That means that if a disaster were to occur, any system outage would have minimal patient impact.

According to David Miller, the senior IT director and chief technology office for Baystate Health, "We needed to find a solution that was both cost effective and played well with our new software-designed data center journey. US Signal stepped up and delivered."



ABOUT US SIGNAL: US Signal is a leading IT solutions provider, offering connectivity, cloud hosting, colocation, data protection, and disaster recovery services — all powered by its wholly owned and operated, robust fiber network. US Signal also helps customers optimize their IT resources through the provision of managed and professional services. USSIGNAL.COM / 866.2.SIGNAL

