Customer Stories

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Healthcare
Baystate Health

Business Challenge

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.

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 and two annual managed DR tests to ensure everything works as planned.

Built to HIPAA standards, US Signal's DRaaS includes a fully executed DR playbook, monthly health checks to stay on top of the aggressive RPO and RTO SLAs.

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

Because it didn't require additional hardware and licensing costs, the solution has lowered Baystate Health 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.

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."

Nonprofit
Christian Brothers Services

Business Challenge

Christian Brothers Services wanted to outsource its data center and backup operations. Among the challenges was finding a provider that could deliver the same "TLC" as its own IT team. The service provider would also need an in-depth understanding of the organization's compliance requirements, particularly HIPAA.
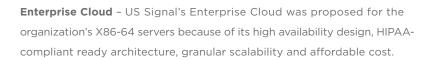
The US Signal Solution

As Christian Brothers Services' CIO Tom Drez put it, "US Signal was able to put together the complete package of products, services and people. We found them to be very knowledgeable, personable and experienced and, all things being equal, we're always going to pick based on people."

The proposed package of products and services included:

Redundant MPLS WAN – Diverse last mile and street-level route design could minimize down time associated with loss of connectivity. The use of MPLS WAN would also allow for more predictable network performance to ensure a quality end user experience.

Internet with Cloud-based Advanced Security Plus – Centralizing Internet service at the data center with protection by a Unified Threat Management (UTM) platform would provide best-of-breed protection against Internet threats.

Enterprise Cloud – US Signal's Enterprise Cloud was proposed for the organization's X86-64 servers because of its high availability design, HIPAA-compliant ready architecture, granular scalability and affordable cost.

IBM I Series hosting/Hosted Private Cloud – Providing the I Series in a single-tenant IaaS model would ensure the required performance in an OpEx model.

EBaaS – With an established framework for management, monitoring and remediation, EBaaS could effectively reduce Christian Brothers Services" time investment in day-to-day IT tasks.

DRaaS – This continuous data protection model was proposed to provide geographic diversity to a secondary warm site. The solution would generate a much lower RTO/RPO and be fully managed by US Signal.

Business Results

Among the key benefits has been that Christian Brothers Services' IT operations team can be more responsive to the business rather than worrying about what the next hardware or software upgrade is going to be.

"We are no longer consumed by what's next on the IT roadmap," Drez explains. "Instead, we can concentrate on the next acquisition or on the next product we will deliver to the members in our plans and programs. If, for example, the healthcare division's customer services manager comes to us with an idea at 8 a.m., we can have something incubated by 2 p.m."

Consolidating data center and backup operations with US Signal has greatly improved the organization's RTO and RPO. The biggest benefit in Tom Drez's mind, however, is that Christian Brothers Services has found a long-term partner instead of just another vendor.

"In our business, we want our members to look at us as extensions of their organizations. So, it works well for us to consider US Signal as an extension of our IT operations department."

Education
Indiana Tech

Business Challenge

Indiana Tech, a private, four-year university, offers degree programs in multiple formats to meet the needs of its diverse student population. That includes online programs with accelerated classes that require students to have access any time and from anywhere they have internet access.

Indiana Tech's IT team manages all the hardware, software, and technical services across the university. Their focus must be on ensuring that students have seamless anytime access to educational materials. They don't have time for dealing with the inevitable issues related to maintaining a data center.

The IT team had anticipated growing participation in online courses. What they couldn't predict was the peak demand periods when usage would spike. They knew uptime was critical as students needed to access the courses on their own schedules, and any outage could affect their ability to complete the accelerated courses in the truncated timeframes. Student access also couldn't be constrained by geography.

The university didn't want to spend the capital to expand its data center.

In addition, the IT department's long-term strategy was to have resources in place to extend their internal data center for business continuity and disaster planning. These parameters positioned cloud services as the best delivery vehicle for the online program.

The US Signal Solution

Indiana Tech had used US Signal's Virtual Ethernet and other services for several years. The university had found US Signal's sales and engineering teams, as well as its Technical Operations Center (TOC), to be responsive and easy to engage when needed.

They invited US Signal engineers to visit the campus and talk to the IT team. The US Signal engineers made sure they understood the team's issues. They then looked at opportunities to meet the university's current needs and help accommodate those that could arise in the future as the university continued evolving its programs to better serve students' needs.

US Signal's solution includes its Cloud Hosting services, which are now being used to provide the elasticity to meet the ebb and flow of capacity needs for Indiana Tech's IT systems. The Indiana Tech IT team has put its Active Directory server into the cloud, and over time will move additional services into this off-premise virtual environment based on business continuity requirements.

US Signal personnel are also responsible for the maintenance and security of the infrastructure as well as the power and cooling costs associated with running a data center.

Business Results

As a result of the US Signal solution, more of Indiana Tech's capital is available for academic-related purposes, and its IT department can focus on developing and integrating applications and systems. The IT department is confident that using US Signal's Cloud Hosting services will enable them to keep up with the demands of the university's continuously expanding online community and capacity for continuity efforts.

The team also appreciates US Signal's hands-on approach as it provides them with unique insight into any technical issues. US Signal's ability to respond quickly and effectively helps support Indiana Tech's core mission: To provide learners of all ages with career-focused professional education.

Manufacturing

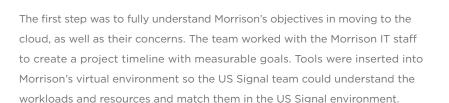# Morrison Industrial Equipment Co.

Business Challenge

Morrison Industrial Equipment Company knew its in-house data center was at risk. Recently, within a two-week period, the adjacent river had surged four feet. But there were also other issues making them consider a change.

The company operates with a very small, lean IT staff. Everything had been virtualized, so most tasks were performed remotely. However, the on-site facilities still had to be maintained, which did take the staff away from more strategic initiatives.

Moving to a cloud environment seemed like an optimal solution. The biggest challenge, however, was how to handle Morrison's IBM P series server. While the company had 35 virtual servers, its IBM P series server wasn't virtualized. That server ran the company's main business applications. Not many solution providers were eager to take on the complexity of combining virtualized and non-virtualized resources — a challenge that would require a hybrid approach and a hardware investment by the service provider.

The US Signal Solution

US Signal was the only IT service provider that said it could accommodate Morrison's needs. US Signal invested in an IBM P series server and installed it in the data center that would also power Morrison's cloud environment. The US Signal team then went to work on setting up the actual migration to its multi-tenant enterprise cloud.

The first step was to fully understand Morrison's objectives in moving to the cloud, as well as their concerns. The team worked with the Morrison IT staff to create a project timeline with measurable goals. Tools were inserted into Morrison's virtual environment so the US Signal team could understand the workloads and resources and match them in the US Signal environment.

The Morrison team shut down their data center down and brought their applications back up in the sequence they would be needed once in the US Signal environment. Everything was documented. US Signal took that documentation and, working with the Morrison team, meshed it with their methods of procedures (MOPs) to clearly define the roles, responsibilities, and steps entailed in the migration process.

A large screen TV was set up so the teams could watch the pre-testing processes to ensure that the desired results could be achieved prior to the actual migration. All servers were in sync between the Morrison and US Signal environments within 6-10 seconds.

US Signal set aside a full Sunday for the migration starting at 8 a.m. with the goal to be finished up by 6 a.m. the next morning. A conference bridge was set up between the two companies, and the teams stayed in communication the whole time. US Signal's managed services team was also on the call in case any emergencies arose.

Business Results

The migration was completed with a recovery point objective of 0, came in under budget, and was completed in less time than was provided in the allotted maintenance window — all with no surprises or obstacles.

While Morrison doesn't have an exact figure to site in terms of the savings generated by the migration project, the organization estimates it is saving approximately $5,000 a month between labor and power costs.

Financial
MEPCO Finance Corporation

Business Challenge

Mepco, an Independent Bank affiliate, was getting ready to move its Chicago office. It was also approaching an IT equipment life cycle refresh, and IT costs were rising. Independent Bank needed to assess what to do with its affiliate's on-premise data center.

The Grand Rapids, Michigan-based bank wanted out of the data center business, and to move to an operating expense (OpEx) model. It determined that migrating to the cloud—in the form of an Infrastructure as a Service (IaaS) model—was the way to go. Because Mepco was owned by a bank and handled payment card processing, one of the challenges was to find a solution that would be PCI-DSS compliant and meet other regulatory requirements.

The US Signal Solution

The US Signal team assessed Mepco's performance, security, and compliance needs, developed concepts, and discussed the implications of migrating to the cloud. Working together, Mepco's parent company and US Signal determined a hybrid approach would best meet the organization's needs.

The main component of the solution was to move Mepco's entire production environment into a US Signal multi-tenant compliant dedicated resource pool. Doing so would help meet the organization's compliance needs while offering the benefits of the cloud. However, the migration needed to be completed in a compressed time frame of 120 days.

Mepco had also previously struggled with an expensive, difficult-to-maintain disaster recovery solution, so Disaster Recovery as a Service (DRaaS) and Enterprise Backup as a Service (EBaaS) were added as well. The DRaaS solution allows for Mepco's workloads to be replicated to a geo-redundant data center inside US Signal, helping to ensure their security and availability. Both DRaaS and EBaaS employ OpEx models and are fully managed, which frees up the customer's IT staff for other initiatives.

Yet another component of the US Signal solution was remote monitoring and management. With probes deployed in the customer's systems, US Signal could monitor workloads and take remediation steps if issues were found as the operating system level, and also provide patch management. The solution frees the customer of the capital expense for the monitoring solution and of the manpower required to operate it. It also helps the customer meet its compliance requirements for up-to-date patch management.

Business Results

US Signal exceeded the customer's expectations by completing the cloud migration a month earlier than the targeted 120 days. The overall solution has delivered significant costs savings from the switch from CapEx to OpEx, as well as time savings for the customer's IT staff. One of the things the customer is most pleased about it how US Signal's contractual portability has allowed it to phase in components of the solution and add more services to meet its changing needs.

As Independent Bank's CIO said, "We can turn down services and transition to new services, porting over the spend without any penalties. It truly is a customized solution designed with our needs in mind."

Retail
S&S Tire

Business Challenge

It was becoming a challenge for S&S Tire's small IT team — and its antiquated IT systems — to keep pace with its growing distribution system. The cloud seemed like a good next move.

At the time, the company was working with a value-added reseller that specialized in voice solutions. Although it didn't offer cloud services, the reseller had recently formed a partnership with US Signal, which did. US Signal met with S&S Tire to discuss cloud options, but the meeting also revealed the need for a new disaster recovery solution.

S&S Tire had been relying on its Virginia data center to house production and backup, which was difficult to manage from its Lexington, KY headquarters. The company wanted to move both workloads closer, but knew a geographically diverse data center was needed to ensure the availability and security of its applications and data should a disaster occur.

The US Signal Solution

US Signal proposed its public cloud to host S&S Tire's distribution site, along with a private internet connection directly connected to the cloud environment. Cloud-based advanced security was included to provide carrier-grade network protection in a safe, secure cloud networking environment.

US Signal also recommended its Disaster Recovery as a Service (DRaaS) solution to replicate S&S Tire's systems to a geographically diverse Midwest site in the event of a catastrophe. US Signal would manage the daily replication. If failover was required, all S&S Tire had to do is make a single phone call. Unlike many other DRaaS offerings, the US Signal option also included a DR audit and documentation of a complete DR plan.

Later when its wide area network (WAN) was being redesigned, S&S Tire again sought out US Signal. US Signal recommended an MPLS cloud to connect all 30 of S&S Tire's remote sites back to its headquarters where the company had a 200M MPLS head end and a 100M Internet port.

Business Results

The services provided by US Signal are helping S&S Tire to achieve better performance and uptime, while ensuring future flexibility, support and scalability for its IT needs. The company now focuses on aligning its technology strategy with its business goals instead of managing its own data centers. It's also saving approximately $75,000 over a five-year term thanks to an MPLS network across all its locations.

Dan Clark, director of information systems and technologies for S&S Tire during the initial US Signal engagement, says one of the most important results coming from the US Signal relationship can't be quantified in dollars alone: the peace of mind that comes from unrivaled support and integrity.

"US Signal has always been honest about everything. Tech support is 'Johnny-on-the-spot'. Based on the service and support we've experienced, we feel very comfortable that if we need something, US Signal can and will deliver."