A Customer Success
from the Experts in
Business-Critical Continuity™

Sequent

Sequent is a consulting and outsourcing services firm helping more than 500 organizations improve corporate performance through the integration of people, strategies, process management and technology. The firm has offices in Columbus, Cincinnati, and Springfield, Ohio, as well as Philadelphia and Birmingham, Ala. Sequent's offerings include human capital management, technology solutions, thought leadership, employee benefit programs, and risk management.

Background

An increase in the demand for outsourced human resources support placed Sequent at the doorstep of opportunity for achieving significant business growth. An increase in the use of information technology was one of the keys to capitalizing on this opportunity. For Sequent, this required a data center infrastructure that could support the current and projected increase in applications used by the organization while providing an available and reliable network for customer data.

Case Summary

Location: Dublin, Ohio

Products/Services:

- Liebert NX 30kVA UPS
- Liebert Challenger Precision Floor-Mount Cooling
- Liebert Mini-Mate Precision Ceiling-Mount Cooling

Critical Needs: Design and implement a new data center that could efficiently meet current requirements while easily scaling to support projected growth.

Results

- Developed a new data center with the flexibility to double, even triple, capacity when necessary.
- Created clear roadmap for tripling data center capacity without disrupting business operations.
- Improved management and reliability of power protection system.
- Increased reliability and availability of IT systems.
- Increased cooling system capacity and performance to ensure even temperatures.

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The Situation

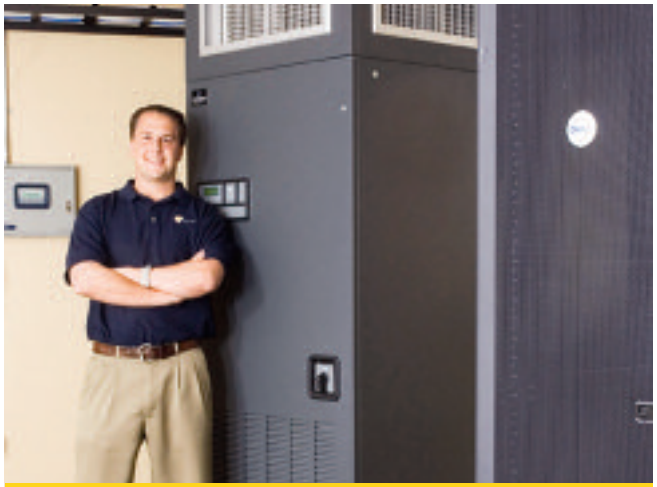
As an increasing number of organizations began to evaluate the benefits of outsourcing human resource functions, Sequent recognized the dramatic shifts in customer demand and began to expand its service offering. This meant Brian Donovan and Chad Wolverton, network administrators with Sequent, needed to expand the company's information technology capabilities to support new applications and business growth.

"Our business is dependent on our IT systems," says Donovan. "Without our technology, the rest of our business cannot function. Naturally, it is imperative that our systems are up and running as intended so that we can serve our clients at the level they've come to expect from Sequent."

According to Donovan, Sequent's customers are accessing the system throughout the day and night. In fact, some of the company's customers have service level agreements based on 97 percent uptime. If critical IT systems were to go down, the implications would extend through their customers' organizations and impact important functions, such as payroll.

The existing data center was approximately 200 square feet in size and relied on a distributed power configuration where each rack was supported by a separate UPS equipment rack. While this approach was sufficient for a limited number of racks, it would create problems as the company grew. As they started transitioning from point solutions to a centralized approach, they realized their planned growth would exceed their existing UPS capabilities.

"Any time you have so many disparate systems doing different things, it is hard to get a good look at everything going on," Wolverton says. "I didn't have visibility to the power and cooling infrastructure and that concerned me. I knew if I didn't rectify that, I would regret it in the future."



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Brian Donovan, network administrator
Sequent

The Solution

When Sequent relocated its corporate headquarters to Dublin, Ohio, Donovan and Wolverton knew there was an opportunity to design a new facility that supported the company's needs today — and more importantly for future growth.

Sequent worked with Sphere Electrical Engineers & Contractors, a Liebert Network Solutions Partner with experience in three-phase power, and Air Force One, an authorized Liebert USA Contractor, to design and install equipment for the new 750 square-foot data

center. As the collective team evaluated Sequent's current situation and roadmap for growth, it became clear that flexibility was going to be paramount in selecting the appropriate support system infrastructure.

Brian Collins, president, Sphere Electrical, notes, "Sequent did it right. Before they moved forward, we took a strategic look at their business' criticality and availability needs and then plotted out a power and cooling configuration that fit their needs. Too often, small businesses are reacting to change as opposed to proactively planning for it."

The team was looking at a facility that would initially house approximately 50 servers across three racks with an additional three racks of communications equipment.

"We know that we need to refresh our technology about every three to four years," Donovan says. "Technology changes so often that if you can't quickly adjust with it, you'll be behind the curve. So, we had to look at a solution that ensured we could respond quickly to change but also fit within our budget."

The first part of the solution was a new, centralized power system that features a 30 kVA Liebert NX. The Liebert NX is a compact three-phase UPS system that is utility and back-up generator friendly. Sequent capitalized on this feature by pairing it with the company's existing generator from its prior location. The Liebert NX battery backup provides 45 minutes of support to minimize switches to generator during brief outages.

"Sequent needed a three-phase unit to meet its forecasted growth," Collins says. "So, we installed a product that gave them the flexibility and availability they needed."

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Brian Donovan, network administrator
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Sequent used a hot aisle/cold aisle data center configuration for the new space to optimize cooling efficiency. Air flows in a circular motion as heat exhausts out the back of a rack and cool air enters the rack though supply vents installed in front of them.

A Liebert Challenger Floor-Mount Precision cooling unit provides complete environmental control, including temperature, humidity and air filtration. It's a self contained system that fits into seven square feet of corner space and is front accessible for service, which reduced the amount of floor space needed to be kept open. The Liebert Challenger is supported by a ceiling-mounted Liebert Mini-Mate unit to create a redundant precision cooling solution that can handle any failovers.

"We're using Liebert's AC4 communication's module to allow the systems to work efficiently together.

This system allows for shared cooling operation to maintain the required five tons of cooling," Collins explains. "If they need to double the cooling to support added technologies, they can easily do so by operating both units simultaneously."

The Results

Sequent's new data center was up and running by the end of April 2007 after a six-month project consisting of design, construction, procurement and installation of components. The resulting facility provides Sequent with the flexibility to double or triple its capacity when necessary.

"The impetus for change was a desire to provide a higher level of assurance to ourselves and our clients as our business grew," Wolverton says. "As part of this, we needed to feel confident about our power and cooling capabilities."

In its first months of operation, the data center was running at a steady temperature of 72 degrees without any hot spots. System availability was provided as desired without any unexpected downtime.

"Liebert is definitely the premier product in the market," Donovan says. "When it comes to making sure your business is functional, it's important you work with the best in the business."

As Sequent's capacity demands continue to grow, it has the flexibility with the Liebert NX to meet these levels via a paralleling cabinet, which allows multiple Liebert NX systems to work together as a single system enabling the UPS to support a wide variety of configurations, including N + 1 and N + N.

"No IT or data center team should operate without a clear view of what is going on within their racks and facility as a whole," Donovan concludes. "We've successfully centralized our power protection with the Liebert NX, so I have a good feeling that we're not going to have any horror stories."

Sequent maintains a proactive service agreement with the service business of Emerson Network Power to ensure proper operation of the UPS unit along with 24x7 support.

For more information on Liebert technology, visit **www.Liebert.com**.