A Power Protection Solution Fit for Success

Product:
Eaton BladeUPS

Location:
Seattle, Wash.

Market Served:
Sportswear

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- Brian Kilborn, Infrastructure manager at Cutter & Buck

Background

Headquartered in Seattle, Cutter & Buck designs and markets upscale sportswear and outerwear. Founded in 1990 and publicly traded since 1995, the company sells its products primarily through golf pro shops, resorts, corporate accounts and specialty retail accounts.Today, the company employs approximately 375 people and 2006 sales eclipsed $131 million.

Cutter & Buck receives, packs and ships thousands of units daily. With a state of-the-art distribution center and computer systems with continuous RF scanning that support real-time order information, product status and history, Cutter & Buck's material handling and information processing infrastructure provides high levels of accuracy and accountability for its worldwide customers. Its mission critical data center depends on a power system that delivers reliable, high-quality power and prevents power disturbances that can harm its computers, corrupt data, and bring business to a stand still.

Challenge

Cutter & Buck was forced to review its uninterruptible power system (UPS) requirements after suffering two product failures. Four years ago, when power irregularities caused a transfer to backup power, the UPS did not perform and the company had to bypass the unit until a replacement could be delivered. A similar event occurred with the replacement units more recently, and the power problem led to several hours of downtime at the distribution center before the system was restored to its correct state.

At the same time Cutter & Buck was confronting issues with its UPS solution, the company was launching a strategy to relocate several development servers to the same distribution center. The goal was to remove about 10kVA from the corporate office.

"Reliable power is essential to running our distribution center. Downtime events are unacceptable and, based upon our experience, we had tremendous trust and reliability concerns regarding our former UPS solutions," says Brian Kilborn, Infrastructure manager at Cutter & Buck. "We knew that a completely different UPS architecture was required to improve our total system availability."

Solution

To avoid future problems and to support the relocation of its development servers into the distribution center, Cutter & Buck performed an in-depth assessment of its data center application requirements. Key evaluation criteria included:

- System uptime requirement for applications
- Levels of redundancy needed to support uptime metrics
- Battery run-time requirements
- Existing network management software interoperability

"In addition to our immediate concerns with power reliability, we sought a UPS solution to accommodate our organizational growth and increasing server requirements. Following our evaluation, we selected Eaton's BladeUPS," commented Kilborn.

The BladeUPS is a rack-based, three-phase UPS solution, which provided Cutter & Buck with the most scalable and flexible power protection architecture for its data center. The three-phase system delivers 12kW of

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efficient, reliable power in only 6U of standard rack space. The UPS is also easily expanded from 12kW to 60kW in a single 19-inch enclosure. With this solution, Cutter & Buck IT managers could simply plug in additional parallel BladeUPS modules to create an N+1 redundant system.

"We wanted to start with an entry level investment and add modules based on our growth. The BladeUPS is the ideal solution that can grow with our data center requirements as time goes on," said Kilborn.

Software and connectivity features also played an important role in the UPS selection process. When configured into a system, the BladeUPS modules behave as one, with monitoring and management functionality delivered via a standard SNMP/Web connection.

Implementation

Cutter & Buck purchased two 12kW BladeUPS modules and four extended battery modules set in a single rack. The two BladeUPS were configured to run in parallel. "Most other paralleling systems on the market use a single central main controller with a backup controller," explained Chris Loeffler, Product Manager, BladeUPS. "If the main controller fails, the system must recognize the failure and transfer to backup control, or the entire system fails. With Eaton's patented approach, each UPS module operates independently and is completely synchronized with the other modules. There is no change in control and no single point of failure."

In addition to the standard Ethernet/SNMP module, Cutter & Buck incorporated an optional IBM® eServer™ Relay Interface Card into the solution which allows for native communications with its IBM AS400 systems. If power goes down, there is a finite amount of time to restore power or allow an orderly shutdown to preserve critical information. To perform an orderly shutdown, IBM AS400 systems can take up to 20 minutes and with the BladeUPS communications capabilities, alarms can now be sent to warn of declining power levels and to trigger an orderly shutdown if power is not restored in a timely manner.

Cutter & Buck managed the installation process of the BladeUPS. "The system is easy to install and requires no third parties for support and maintenance. We had the system up and running in 4 hours" added Kilborn. With limited space on its data center floor, Cutter & Buck IT personnel actually assembled the components in a nearby workroom and simply rolled the finished rack into place within its data center and had an electrical contractor install the incoming power feed.

Results

The BladeUPS has given Cutter & Buck increased confidence and improved reliability and availability for its power system. The modular design enabled the company to deploy the right amount of backup protection at the right price for their current needs with potential to expand in the future.

Working with Eaton, Cutter & Buck can now:

- Protect mission-critical applications with innovative backup power technology designed specifically for high density computing environments
- Support the constant moves, adds, and changes of its data center with a modular, scalable, and flexible backup power architecture
- Conserve valuable rack space with 12kW of power in only 6U of rack height, including batteries
- Accommodate growth by installing additional 12 kW building blocks to 60 kW in a single rack enclosure
- Reduce energy costs and cooling needs through best in-class efficiency performance.

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