Colocation selects solution that reaps benefits for end users

Location:
Reno, Nev.

Segment:
Colocation

Problem:
The addition of new data center suite necessitated the purchase of a highly reliable UPS to safeguard critical equipment. Efficiency, scalability and footprint also factored into the company's list of desired UPS features.

Solution:
Eaton® 93PM, Eaton 9355, PredictPulse™, Service

Results:
The Eaton 93PM met all of Roller Network's needs, delivering high availability and industry-leading efficiency within a compact, scalable design.

"With the UPS operating in ESS mode, it doesn't generate any heat at all. We are getting a great amount of savings on cooling. ESS will become more and more valuable as we continue to add more equipment to the UPS."

Seth Mattinen, Founder and CTO

Background

Originally opening its doors in 2004 with the goal of serving the needs of small and medium businesses, Roller Network initially provided metro Ethernet, classic mail and DNS services. In early 2010, the company bolstered its offering to include colocation, and has since emerged as one of Northern Nevada's premier colocation data centers. In addition, the company is responsible for streaming NOAA weather radio for counties in Nevada and California.

Challenge

Continued growth prompted Roller Network to expand its facility in 2015, with the company building a second customer equipment suite. Paramount to the expansion was the addition of an uninterruptible power system (UPS) capable of delivering clean power and ensuring 24/7 uptime for critical equipment.

With the typical customer occupying anywhere from one section of a rack to 10 racks, "they all rely on us for cooling, floor space, infrastructure and power," explains Seth Mattinen, founder and CTO of Roller Network.

Because of that, a UPS providing exceptional reliability is vital to the collocation provider, especially considering the toll — and expense—unplanned downtime would take on the company. "The quality of the UPS system is critical to our reputation," Mattinen acknowledges, noting that the company maintains stringent service level agreements (SLAs) with its customers. "We very much depend on the units to be reliable."

Roller Network also desired a high-wattage UPS that could power a substantial amount of equipment without occupying a lot of valuable floor space. Energy efficiency, scalability and premium service were other key considerations.

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Solution

When it came to selecting a UPS manufacturer, Roller Network turned to the name it has trusted to preserve uptime within its data center for the past six years: Eaton.

Indeed, with a pair of Eaton 9355 units having successfully safeguarded equipment in Suite One since the facility first opened, Mattinen has complete confidence in the brand.

"Once we decided to build the first colo floor, we knew we needed a quality UPS system. Our Eaton 9355 units have been bullet proof," he raves. "Their track record of zero problems is a big part of the reason we went with Eaton again."

To protect Suite Two, the firm selected the Eaton 93PM UPS, which combines unprecedented efficiency and reliability with a space-saving and scalable design, making it an ideal solution for today's data center environments.

Deployed in its own power room on the colocation floor, the 93PM reduces power and cooling expenses with its industry-leading energy efficiency. Roller Network opted to further bolster efficiency by adding Eaton's Energy Saver System (ESS), which enables the 93PM to attain an efficiency level of greater than 99 percent, making it the only technology on the market capable of yielding such results. Using ESS, the UPS intelligently adapts to utility power conditions while supplying clean power to the connected equipment. Even more, because UPSs using ESS maintain 99 percent efficiency even when lightly loaded, the technology can deliver gains of up to 15 percentage points in efficiency over traditional models in the typical operating range.

In fact, the energy savings from Eaton's ESS typically recovers 100 percent of the cost of the UPS cost over just a three- to five-year time period. At a 250 kW load, for example, the savings represents $4,000 per year per point of efficiency gain.

"With the UPS operating in ESS mode, it doesn't generate any heat at all," Mattinen confirms. "We are getting a great amount of savings on cooling. ESS will become more and more valuable as we continue to add more equipment to the UPS."

Thanks to the scalable design of the 93PM, the unit will serve Roller Network well into the future. At startup, the UPS's 200 kW shell was supporting 20 kW of equipment, which will continue to grow as more and more customers' equipment is attached.

"We really value the scalability," reveals Mattinen, who initially purchased three power modules for the unit. "Being able to defer the cost of additional modules until a later date really helps us. As a smaller, local business, the ability to expand as needed, and as more revenue comes in, is very important to us."

As a colocation provider who profits from data center space, Roller Network is ever-conscious about making the most of every square foot. That's why Mattinen was so impressed with the compact footprint of the 93PM, whose design accommodates internal redundancy and supports a variety of flexible installation options, including wall, in-row, and hot/cold aisle configurations.

"This was yet another reason we chose the 93PM," says Mattinen, who chose to place the unit against a wall. "It only required clearance on the top, and not in the sides or back, which really helped us maximize the colocation floor space. Being able to stick it against the wall allows us to gain that much more floor space for customer equipment."

Roller Network has also been impressed by the easy management afforded by the 93PM. The unit's LCD touch screen provides instantaneous access to detailed status information through a large user-friendly interface—a feature Mattinen says earns rave reviews from potential customers on facility tours.

"It's been very helpful for selling people on our facility," he explains. "We walk them around and show them what they're going to be paying us for, so the appearance of the unit is important. It not only looks impressive and like a very high-end product, but we can show people exactly what it is doing."

Keeping a pulse on how the 93PM is performing at all times is easy for Roller Network, thanks to Eaton's PredictPulse Remote Monitoring Service. Providing real-time monitoring of more than 100 UPS and battery alarms, PredictPulse delivers monthly reports that detail the status of the unit, including information on voltages, loads, temperature and humidity. The report also summarizes the top 10 performance and environmental parameters, battery events, availability percentage, and comparative status against recommended specification. Even more, if any type of power anomaly is detected, Roller Network would be notified immediately. The service not only enables many issues to be resolved remotely – often before a customer even knows a potential problem exists – but will automatically dispatch a technician to the site, if needed.

Mattinen, who switched to Eaton after experiencing reliability and service issues with other power protection manufacturers, reports that, "With Eaton, none of that has been a problem."

The CTO gains additional peace of mind knowing his UPSs are backed by an Eaton service plan.

"The units receive preventive maintenance every year," he says. "I've worked with the same technician the past six years and it's really nice having the same person coming in who is already familiar with our site and knows how we do things."

Furthermore, Mattinen praises Eaton for providing easy access to technical support and exceptionally fast response time if an issue ever arises. He also appreciates the fact that factory trained technicians are the only ones performing service on the units. "We strive to limit our outsourcing for our customers," he explains.

Results

By deploying Eaton power protection solutions, Roller Network is free to focus on providing the premium services the company delivers to its customers. With the 93PM safeguarding Suite Two, Roller Network is able to:

- Gain an unparalleled level of reliability and uptime
- Slash power and cooling OPEX with industry-leading efficiency and ESS
- Reduce costs and unexpected growth risks with the unit's scalable design
- Conserve valuable floor space with the 93PM's compact footprint
- Increase uptime through PredictPulse's 24x7 monitoring and reporting capabilities

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For more information, please visit: Eaton.com/93PM

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