



Atlantic.Net data and colocation services provider relies on Eaton BladeUPS for 100 percent uptime.

Product:

Eaton® BladeUPS® and Wright Line rack enclosures

Location:

Orlando, Fla.

Markets Served:

Data and Colocation Services Provider

Background

Established in 1994, Atlantic.Net is a market-leading colocation and data services provider. Operating a world-class, 25,000-square-foot colocation data center in Orlando, Fla., the company strives to help businesses around the globe manage their data needs through a wide variety of services.

With an offering that includes cloud servers, managed and dedicated servers, colocation, Internet connectivity, business continuity, data backup, security and private networks, Atlantic.Net enables companies to focus on their core business, while eliminating the expense of capital equipment purchases and ongoing IT management costs. Since its inception, the firm's technological savvy and strategic acumen have been the foundation for its reputation and profitability.

Challenge

Managing — and protecting — the data of thousands of business customers is no small task for Atlantic.Net. That's why the company must take extreme measures to ensure high availability and uptime at all times.

Bound by stringent service level agreements (SLAs), even the slightest amount of downtime could prove devastating for Atlantic.Net. "We'd lose customers," acknowledges Brett Haines, the company's operations manager. "We would have to make huge payouts to our customers for our SLAs. Not to mention, any report of downtime would be a major deterrent for attracting new potential customers. We absolutely must provide 100 percent uptime."

Three years ago, the rapidly growing firm realized that it needed to bolster the amount of power protection for its critical systems. The company's existing solution — a pair of 400 kVA Eaton 9315 units — was delivering the exceptional level of reliability that the firm required. However, the company desired a UPS capable of growing with its needs. In addition, it was looking for a flexible footprint, as well as a low initial investment.

Atlantic.Net discovered everything it desired — and then some — in the Eaton BladeUPS, an uninterruptible power system (UPS) specially designed for high-density computing environments.



Powering Business Worldwide

Solution

Among the biggest boons for Atlantic.Net is the fact that the BladeUPS is the most scalable backup power protection solution of its kind. With the ability to increase capacity by combining 12 kW modules in building block fashion, the UPS is able to expand from 12 kW to 60 kW in a single industry-standard 19-inch rack. Because its scalable architecture was designed to enable customers to deploy exactly the amount of backup protection required for their existing IT requirements — and expand as needed later — Atlantic.Net never has to worry about outgrowing its system.

"This is one of the best features of the units," confirms Haines, who has integrated more than 50 BladeUPS units into the data center over the past three years. "We've been transitioning them in as needed. As more customers come to us, we've been able to expand with more BladeUPS units."

Equally beneficial is the company's ability to employ a pay-as-it-grows approach. "As we put them in, it enables us to not have to expand large sums of cash upfront," Haines points out. "When you buy a 400 kVA unit, it requires a large sum of money upfront, even though you may be only using a small portion of the available kVA. The BladeUPS just made more sense."



BladeUPS units are simple to install and service with true plug-and-power connections, hot-swappable batteries and electronics modules.

For Atlantic.Net, the model's scalability has been a perfect fit for the firm's expansion into powering cloud servers. "It allows us to pass that flexibility on to our customers," explains Haines. "The more the cloud computing service grows, the more we'll need to grow, as well — and the BladeUPS gives us that flexibility."

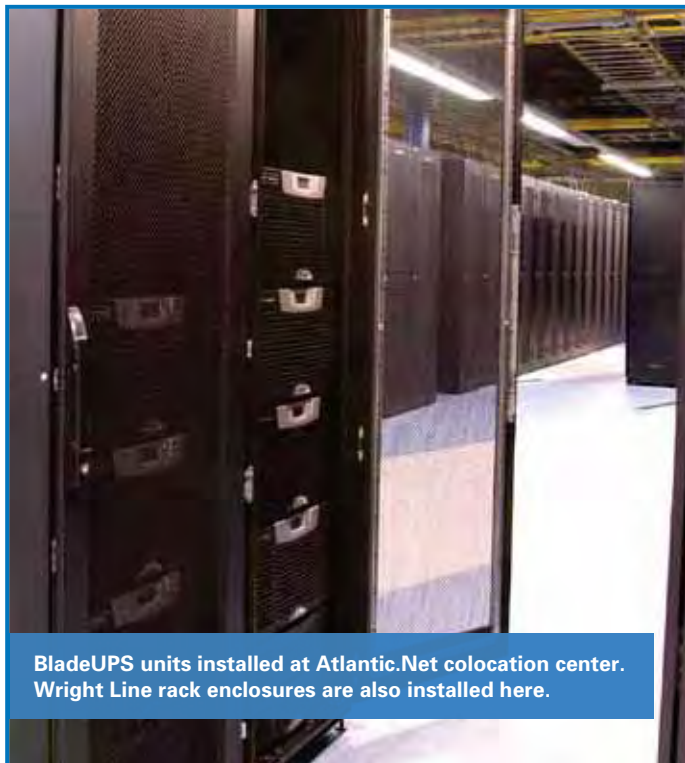
With units installed on the colocation floor, as well as a dedicated server room, the BladeUPS units are also delivering unmatched reliability and uptime to Atlantic. Net's expansive range of servers and switching gear.

To achieve the highest level of availability possible, BladeUPS units can be arranged in a parallel configuration using Powerware Hot Sync® technology. Built directly into the BladeUPS, Hot Sync allows each UPS module to operate independently — yet completely synchronized with the others — eliminating any single point of failure. Furthermore, its intelligent design automatically detects parallel modules and fully configures itself for parallel operations. Up to six BladeUPS modules can be paralleled for additional capacity or redundancy.

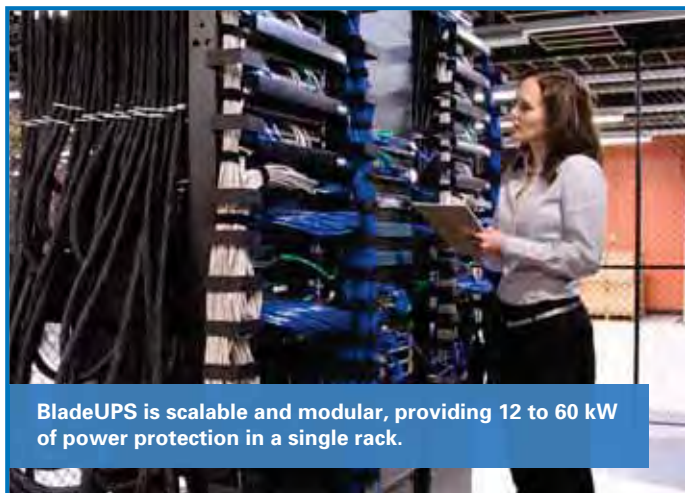
"We usually start with two in a rack and go to five as we need more power," explains Haines. "It's great that there is a redundant system in place so if one fails, we'll still be up and running. When an alarm goes off, the failover capability gives us time to troubleshoot any potential problem," he adds. "We don't have to worry about downtime."

Another major selling point for Atlantic.Net was the units' easy serviceability. Battery and electronics modules can be hot-swapped in minutes without interrupting power to the critical load.

"The ability for us to service the units in-house was an attractive feature," Haines reveals. "Being able to replace batteries ourselves has helped a lot. The units are very easy to work on and user-friendly. We can even stock parts."



BladeUPS units installed at Atlantic.Net colocation center. Wright Line rack enclosures are also installed here.



BladeUPS is scalable and modular, providing 12 to 60 kW of power protection in a single rack.

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*- Brett Haines,
operations manager*

Another factor in Atlantic.Net's selection of the BladeUPS was the model's small footprint, which conserves valuable rack space by supplying 12 kW of power in just 6U of rack height, including the batteries. Even more, because of its unique design, the BladeUPS can be deployed in a number of different manners, from a distributed architecture with one unit in each rack, to an end of row configuration with up to six units in a rack, to a central system placed in the electrical closet rather than on the IT floor.

"Our ability to place them wherever we want, without a large footprint in one space, was a huge advantage," Haines agrees.

The company is also enjoying an unexpected benefit from the BladeUPS units — leading energy efficiency. Although when it first began integrating the units, Atlantic.Net wasn't heavily focused on power and cooling expenses, over the past few years it has become an increasing concern. That's why the colocation provider values the BladeUPS' industry-leading 98 percent efficiency rating, which can save thousands of dollars in utility costs. Even operating at half load — where other UPSs typically achieve much lower efficiency — the BladeUPS performs more efficiently than competitive modular products at full load, while dissipating one-third of the heat.

"Increasing the efficiency of our facility has been a top priority," Haines acknowledges of reducing power and cooling bills. "And it's great that we made this move to the BladeUPS to offset rising power costs."

Additionally, Atlantic.Net also uses Wright Line racks. Eaton recently acquired Wright Line to offer its customers more world class products.

Installed since Atlantic.Net's inception, they now have a number of Wright Line cabinets, representing just less than half the racks in their facility. "We love the Wright Line racks," comments Brett. "They are strong, durable and surpass other racks we have used in our facility. We also really like the locking mechanism. They are the older style, manual locking units, which allow for easy replacement should someone walk off with the key by accident."

Wright Line's strong enclosure and air management portfolio coupled with Eaton's market-leading UPS and power distribution offerings creates a comprehensive set of solutions that will help customers like Atlantic.Net meet the challenges associated with energy efficiency, thermal management and capital deployment.

Implementation

For a UPS as revolutionary as the BladeUPS is, the solution is surprisingly simple to install.

"We had Eaton install the first few," Haines reports, "but the rest we have done ourselves. It's a very easy and straightforward process."

Residing in storm-friendly Florida means that the BladeUPS units are tested fairly regularly by power anomalies and blackouts. "They have always performed exactly as they should," Haines reveals.

This level of reliability translates to a benefit on which the operations manager cannot place a price tag — peace of mind. "The ability to have that failover protection and not have to stress to get there onsite immediately for a repair is invaluable," says Haines. "With a larger unit, if something happens then the whole UPS goes down. With our system, we have four other BladeUPS that will take over the load if one goes out."

As Atlantic.Net plans for more expansion in the future, it is grateful to have a power protection solution that can keep pace with its changing needs. Currently investigating the possibility of adding remote locations for cloud computing throughout the nation and even abroad, the company is considering deploying Eaton's BladeUPS Preassembled units to these outlying sites.

"For those locations, having a solution where you just plug it all in and it's ready to go would be great," says Haines.

Results

With dozens of BladeUPS units safeguarding its systems, Atlantic.Net is able to:

- Ensure the continuous availability of critical servers for its customers — preventing downtime and upholding its SLAs
- Easily expand its power protection solution in a cost-efficient manner to accommodate future growth
- Preserve valuable data center space with the UPS's high power density and rackmount deployment
- Easily service its own units, thanks to the simple design of the BladeUPS



Eaton BladeUPS



Wright Line racks are designed to meet the demanding needs of today's data centers.



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