Success Story: Atlantic.Net

Markets Served
Data Centers and IT

What was really appealing about VMMS is how all three modules are energized. Although only two are carrying the load, there is always the third on standby, charged and waiting. We are getting greater efficiency using just two modules.

Brett Haines, director of operations

Unrivaled uptime, efficiency and performance with Eaton

Location:
Orlando, Fla.

Segment:
Colocation

Problem:
Ensuring 100 percent uptime is a prerequisite for the major colocation facility, which needed to upgrade its core UPS.

Solution:
Power Xpert™ 9395, VMMS, Power Xpert Software, Service, Eaton® Vantage

Results:
Ultimate uptime and availability was delivered through the 9395 UPS, coupled with power management software and other Eaton products.

Background

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

With an offering that includes virtualization hosting, cloud servers, managed and dedicated servers, colocation, 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.

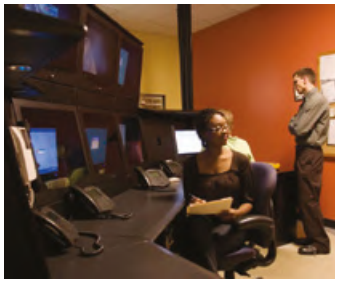
Challenge

As a leading colocation and hosting solutions provider tied to strict service level agreements (SLAs), downtime is simply not an option for Atlantic.Net. Even a momentary blip in availability could yield undesired consequences. "The effects would be substantial," reveals Brett Haines, the company's director of operations. "It would not only adversely affect our business, but it would also affect our customers' confidence in us. We absolutely must provide 100 percent uptime."

Late last year, as the company's existing Eaton 9315 uninterruptible power system (UPS) was approaching the end of its product life cycle, Atlantic.Net began exploring options for a new unit capable of safeguarding its critical equipment and customer data.

"These UPS units protect a wide range of dedicated servers, colocation servers, and virtual and blade servers," Haines explains. "It's all very high-end equipment."

Atlantic.Net's high availability requirements demanded that a new UPS offer exceptional reliability. In addition, the company sought a unit with redundancy, a small footprint, high efficiency and robust communication capabilities.



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Solution

Based on the solid track record of its existing 9315 — not to mention a number of Eaton BladeUPS® units operating successfully in its Orlando facility — it was no surprise that Atlantic.Net once again chose Eaton to deliver unparalleled reliability.

The company discovered everything it was seeking in the 9395 UPS. Having purchased an 825 kVA model — comprised of three modules providing N+1 redundancy — Atlantic.Net has gained the consummate level of protection it was seeking.

The 9395's unprecedented combination of power performance, reliability and efficiency provides the highest availability on the market — in part due to its inherent redundancy option, which allows the unit to be configured so its uninterruptible power modules (UPMs) automatically act as N+1 redundant systems.

In addition to its impressive reliability and redundancy features, the 9395 is also helping Atlantic.Net achieve utility savings through a high efficiency rating of greater than 94 percent, which slashes utility costs, creates cooler operating conditions, enhances reliability and extends the overall life of the UPS components.

"We have made a substantial capital investment in our power infrastructure and it is very important to us that we are able to get a return on investment on this," Haines acknowledges. "It is too early to know firm facts and figures on what our savings will be, but we are looking at saving at least 10 percent over our prior installation due to the efficiencies that have been introduced by the 9395. We could see possibly even higher savings once we receive our power bill and correlate it with our usage from our Power Xpert monitoring software."

Indeed, Atlantic.Net has been able to cast a wide view across its network thanks to Eaton's Power Xpert enterprise software, which offers systemlevel management of power infrastructure via a web browser, from any desktop, on one screen. The software not only provides access to critical information from any location, but also includes the Trend Viewer, Layout Manager and Quality Manager modules. "I'm amazed by the different levels of detail and the reports we are able to obtain," Haines reveals.

In addition, Power Xpert allows users to customize the conditions under which alarms are triggered — including firstline and escalations — making it easy to identify which device is in alarm and where it is located.

Furthermore, even greater levels of efficiency and reliability are being realized by Atlantic.Net with the deployment of Eaton's Variable Module Management System (VMMS) technology. With VMMS — which optimizes overall system efficiency even at low load levels — the UPS sets redundant power modules to ready state, enabling the remaining power modules to drive the load with higher efficiency. When the load increases again and more power modules are needed, the system shifts the load into additional modules immediately. VMMS adapts both to a single UPS consisting of multiple power modules and to larger, multiple UPS parallel systems.

"What was really appealing about VMMS is how all three modules are energized," Haines says. "Although only two are carrying the load, there is always the third on standby, charged and waiting. We are getting greater efficiency using just two modules."

Furthermore, as a colocation service provider, Atlantic.Net is ultra-conscious about making the most of every square foot. That's why the 9395's small footprint— up to 60 percent less than competitive units —was ideal for the company, with the unit occupying minimal real estate in its data center.

"The footprint has been drastically reduced compared to the replacing unit," Haines confirms.

In addition, as Atlantic.Net's power needs increase, the 9395 can be expanded in building-block increments by adding additional modules, eliminating the need to purchase a new UPS. This advantage not only contributes to the solution's maintainability, but is especially valuable to the firm whose customer base is constantly expanding.

To ensure the ongoing reliability and optimal performance of its UPS solution, Atlantic.Net relies on an Eaton service plan, which includes regularly scheduled preventive maintenance calls.

"We need to guarantee 100 percent uptime for our customers, so a service plan is crucial for us to ensure that our units are 100 percent healthy," Haines explains. "With Eaton service engineers examining the units, we know that no short cuts are being taken, and the engineer would be able to find any potential problem ahead of time. We like to be proactive instead of reactive."

Also present within Atlantic.Net's data center are more than 100 Eaton Vantage S2 cabinets. The enclosure systems feature a modular design that addresses air volume, air direction and heat exhaust within the enclosure. As applications grow or equipment is consolidated, cooling capacity can easily be increased by modifying the doors, side panels and tops, lowering total cost of ownership (TCO).

"I like how sturdy and well-built the cabinets are," Haines says, "From a security standpoint, you know someone isn't going to be able to just pry the door open. They also have great wire management ability."

Eaton transformers and remote power panels are also deployed in the company's data center. "These are an integral part of our power plant and greatly complement the industrialgrade UPS units," notes Haines.

The operations team is now in the process of examining several other power quality and power distribution products available through Eaton.

"We are currently working toward adding environmental monitoring and other aspects that Eaton is able to provide," Haines reveals.

Results

With the Eaton solution in place, Atlantic.Net is able to:

- Ensure continuous uptime and high availability of critical equipment in its data center, protecting its reputation and upholding SLAs
- Preserve valuable data center space with the 9395's small footprint
- Easily monitor and manage network infrastructure with Power Xpert
- Maintain the ongoing health and reliability of its critical systems with an Eaton service plan
- Fulfill multiple data center needs through a single source, with Eaton's full line of modular furniture, transformers, and other power quality and distribution products

Learn how the Power Xpert can help you at Eaton.com/9395.

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