

# Sticking with Avocent pays dividends for financial services firm

## A Case Study from Emerson Network Power



*This multi-billion dollar financial services firm is one of the largest of its kind in the United States. The firm serves more than one million clients, helping them to track and secure their financial futures.*

### **Business Type** Financial Services

### **Business Needs**

Modernize its business continuity platform to enable faster Mean Time To Recovery (MTTR) across multiple sites

### **Solution**

Avocent® Universal Management Gateway  
Avocent DSView™ Management Software

### **Key Benefits**

- Consolidation of all data center management functionality into a single interface
- Secure, out-of-band, centralized management of all of the firm's connected IT and network devices
- Streamlined cable management
- Easier routine management
- Emerson's Trade-Up Program made migration less costly
- Avocent software enables easier, more cost-effective future growth

### **The Challenge**

The firm operates a primary data center along with a disaster recovery data center in a colocation facility 30 miles away. The firm's IT team needed to modernize its out-of-band/remote access solution to better support mean time to recovery (MTTR) for both its primary and remote data centers.

"Essentially, the equipment we'd been using for the last six years was reaching its end-of-life status," says the firm's network engineer. "It had performed reliably and without any problems or complaints from our end users. But over those six years, we continued to grow at about five percent annually, and our storage had doubled over that time. Our server count had gone up as well. We were virtualizing some servers, so the physical count wasn't as high, but our capacity had grown tremendously."

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– Network Engineer

The engineer says his firm had two rack groupings: one was KVM-based and the other, cross-wired for system administrators. Rapid response was a key priority for the IT team: "We have to guarantee customer service, and while we're aware that systems occasionally fail, downtime is not a viable option," says the engineer. "Our Recovery Point Objective (RPO) requires us to recover all of our data, except for the last 10 minutes. Right now, we have a 24-hour system requirement for what we call Priority One, and 48 hours for Priority Two. It's good, but we wanted to do better. We wanted to cut Priority Two by half, to Priority One level. And we wanted to move from Priority One to 'five-nines' reliability." That level would mean that the firm's downtime could only amount to little more than one day a year, based on 24/7/365 uptime.

That wasn't all that had changed: while the company had used Avocent equipment for several years, it had increasingly deployed embedded service processor technology and was challenged with building a solid infrastructure and methodology that would enable them to manage permissions, passwords as well as with giving IT complete visibility to its servers, routers and security devices. "We were specifically seeking top-of-rack design," says the firm's engineer. "We'd previously gotten rid of all of our copper wiring into those cabinets, moving instead to fabric extender technology (FEX).

The company thoroughly investigated the market, checking with multiple vendors, to see who could meet its needs. Another vendor told the engineers it had products on its roadmap that would meet their future requirements, but it clearly didn't have the capabilities that would meet their immediate needs. That was not acceptable.

### **The Solution: Avocent products**

From the start, Avocent products were the logical choice for the financial services firm. "Avocent met our needs immediately. We did our due diligence and found that Emerson was the only company capable of doing what we needed, now and for the future," says the network engineer. Emerson deployed a team of Avocent product experts who engaged with their customer.

“The Emerson team was really good, and it was a great experience working with them,” says the network engineer. “They had the ability to understand what we needed from both our software and hardware architectures, and it really impressed us when they brought in their product manager and we talked about future product ideas and requirements. They listened to the ideas we thought were important.”

Emerson’s experts recommended the company migrate to the Avocent® Universal Management Gateway (UMG4000) appliance, providing the firm with secure, remote access and control of IT assets throughout the data centers. The Avocent® UMG4000 appliance delivered auto-sensing and device discovery capabilities, eliminating the time-consuming task of manually reconfiguring infrastructure changes as additional devices were added, and it offered heterogeneous server support, allowing the client’s IT team to manage servers regardless of vendor or operating system and embedded service processor regardless of the technology.

Emerson also recommended an upgrade to the Avocent DSView™ 4 management software, which enabled the firm’s network operators to consolidate all data center management functionality into a single interface, an absolute necessity for complete control in a 24/7 data center environment. The Avocent DSView™ 4 software enabled secure, out-of-band, centralized management of all of the firm’s connected IT and network devices in at its primary production site as well as its remote backup center. The Avocent DSView™ 4 software also allowed the firm to manage its data centers in a more accessible, extensible and secure manner.

“Migrating to Avocent DSView™ 4 software was appealing,” says the network engineer. “We found ourselves basically just changing out the backend software.” The Avocent® UMG4000 upgrade, meanwhile, was made far easier through the Emerson Network Power Trade-up Program, which rewards existing customers by making it easier for them adopt the latest Avocent technology.

“We performed a formal evaluation of the Avocent equipment that Emerson sent us, and we had Emerson personnel on-site to support us,” says the network engineer. “That was another differentiator in Emerson’s favor. They shipped us a product for evaluation without any problem; another vendor we were talking with wasn’t willing to do that. A hands-on evaluation was extremely important to us. We’re touchy-feely, and we want to know what we’re getting into before doing the full deployment. When the other firm wasn’t willing to let us evaluate their product on-site, it was like a red flag for us. If someone is not willing to lend you a piece of equipment...it’s like test-driving a car before you drive it. That sent a clear signal, and it was a pretty big factor in our decision to stay with Emerson and deploy next generation data center technology.”

The deciding factor, however, was functionality. “The products did what we wanted them to do, the way we wanted them to do it,” the engineer says.

The proof that the firm had made the wise decision through its choice of Avocent solutions came during the cutover from the old to the new: transparency to the firm’s end-users, both network engineers and system administrators, was critical. “Different subgroups handle various servers and applications,” the engineer says. “The fact that we didn’t have to retrain our people on how to use KVM was very attractive. The fact that we could make it transparent was a nice bonus.”

The cutover was actually performed in the middle of the business day; administrators sent out emails saying servers would be unavailable for the next 15 minutes. And thanks to the Avocent DSView™ 4 software, that’s all it took. “Our end-users didn’t even realize the back-end was changing. We got really lucky and our work was really well timed and proven,” the engineer says. “The Avocent software performed as advertised, with no gotchas. It just did the work the way it was supposed to.”

The firm is using Avocent® UMG4000 appliance with a dual-interface IQ module and Avocent DSView™ 4 software, at both its primary production site and remote disaster recovery site. “By taking a ‘top-of-rack’ implementation, we were able to cut cable density by half. We had been using older legacy equipment as our old KVM system, and we had to run cable from one cabinet to the other. Now, with Emerson’s advanced solutions, we’ve streamlined cable management. It’s easier to rack and unrack our servers and perform routine maintenance,” the engineer says.

#### The Future

“We’re growing continuously, and we’re becoming more focused on our remote disaster recovery site; we’re expecting that its physical footprint will double as well. We’re looking at making it more of a high availability solution instead of a warm site,” the firm’s network engineer says.

“We want to make sure we have the ability to support additional hardware. In order to be ready for 2020, there’s a lot of work that has to be done, and we face budget constraints, just like virtually every other firm.”

“Implementing the Avocent® UMG4000 appliance and Avocent DSView™ 4 software today gives us one less headache down the line. We’ve grown to count on the reliability of Emerson’s products, and our partnership with Emerson to deliver the capabilities we need over the next decade,” he concludes.

**Emerson Network Power**  
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