

Gain agility with remote management and reporting.

CASE STUDY ScaleMatrix | Feb 2015



INDUSTRY

Data Center & Colo Facilities

LOCATION

San Diego, CA; Houston, TX
with 6,000+ Server Technology
CDU's Deployed

KEY CHALLENGES

- > 100% Uptime
- > Power High Density, High Efficiency Environment
- > Data Center Power Monitoring and Management
- > Remote PDU Management
- > Real-Time Power & Trend Reporting to Customers

SOLUTION

- > XXX

BENEFITS

- > XXX

100% uptime starting day one. Thousands of deployments without a hitch.

ScaleMatrix executes flawless performance with its revolutionary new data center approach. ScaleMatrix worked hand-in-hand with Server Technology's power experts to deliver maximum uptime, ultimate reliability, cost control, and a better night's sleep.

"I've tried the rest and although it's a cliché, these are the best (PDUs.) They're tried and true for us for almost a decade, at seven different data centers. If you're looking to simplify your operation, control costs and have a great partner that understands your business and can help you grow, Server Tech is the choice."

- Chris Orlando, CSMO/Co-Founder, ScaleMatrix

Server Technology Solution

Sentry Power Manager (SPM)

- > Power Monitoring and Management Software

Sentry Switched 24 & 48-Outlet Rack PDUs

- > Custom-designed for ScaleMatrix custom racks



ScaleMatrix Case Study: Customer Feedback

“Server Tech has allowed us to exceed our clients expectations. Their SPM and PDUs have allowed us to minimize overhead from a cost and management standpoint by providing better value and a better quality product with more features and flexibility.”

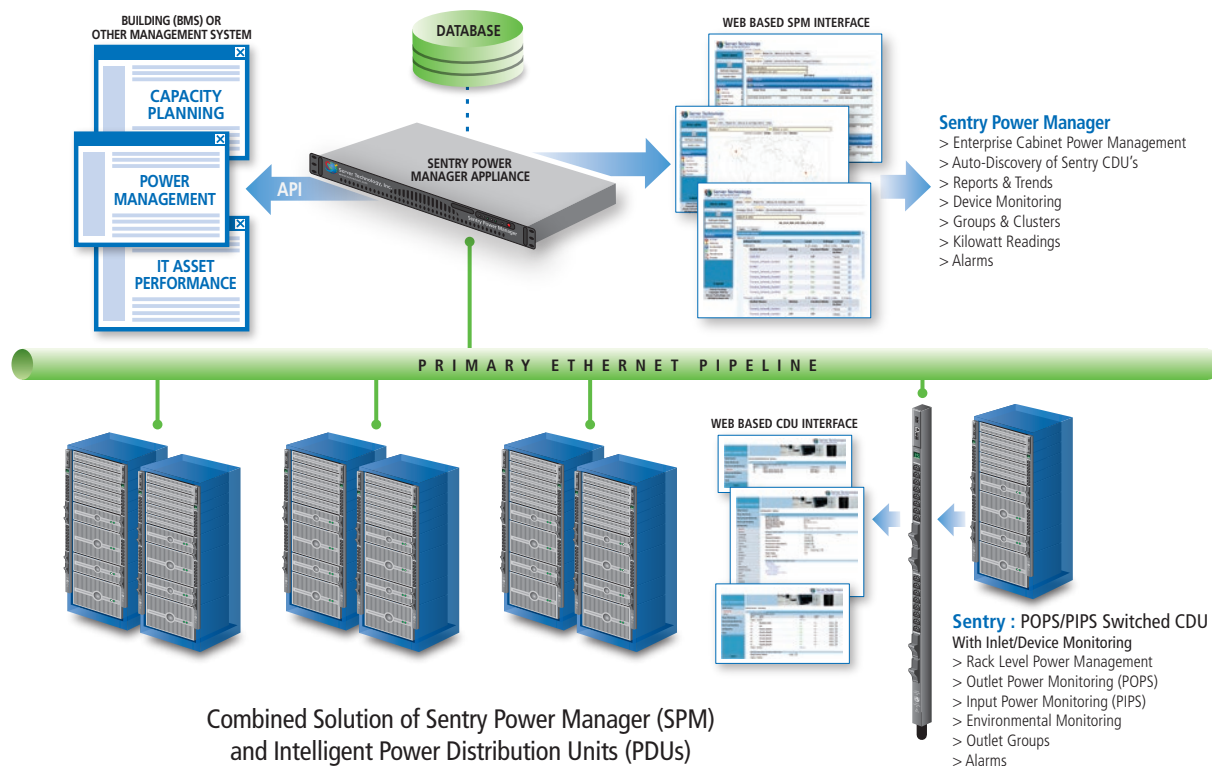
- Chris Orlando, CSMO/Co-Founder, ScaleMatrix

100% Uptime

Server Tech’s 100% performance tested PDUs and SPM power management solution allow ScaleMatrix to tout 100% uptime. ScaleMatrix clients have enjoyed zero downtime in both of ScaleMatrix’s San Diego and Houston facilities, over the past three years.

High Density Environment Optimized for Energy Efficiency

SPM helps ScaleMatrix operate their maximum capacity Dynamic Density Control™ infrastructure platform to provide their customers with a 30% power savings. Server Technology PDUs power ScaleMatrix’s Dynamic Density Control™ platform and their new Extreme Density Center, offering 40kw-50kw per cabinet, designed for computational and high performance computing customers.



ScaleMatrix Case Study:

Cloud Services & Colocation Facilities

It's big business these days. The competition is fierce and the options can be overwhelming and expensive. ScaleMatrix provides a totally different kind of customer and IT experience to separate itself from other cloud/colocation providers in the marketplace today.

ScaleMatrix is a revolutionary new kind of data center. It offers clients premiere colocation services, public cloud, and private cloud services. Built from the ground up for the cloud – for high bandwidth applications — by data center owners and operators. Designed to offer 30% savings in energy with a unique high-density approach and patent pending infrastructure.

“We’re not just a colo, but a full service private and public managed cloud featuring storage, biometric security, and the latest patent pending technology designed for heavy computational and high performance computing,” said Chris Orlando, CSMO/Co-Founder of ScaleMatrix.

With more than a decade of traditional data center construction and management experience as a guide, the ScaleMatrix team set out to develop a revolutionary new kind of multi-tenant data center. Three years in the making with research, development, and testing, ScaleMatrix offers customers brand new technology and a brand new high density platform designed and built to embrace and enhance the benefits of cloud computing.

“We consider Server Tech a piece of our foundation as we standardize on products and solutions that we feel provide excellence for our customers. The San Diego ScaleMatrix data center is the seventh distinct data center property we’ve built together with Server Tech, and we’ve worked with them for seven Years. In the beginning, we tried other PDUs. We had problems, issues, and even a fire caused by a faulty CDU. We then found Server Tech, their unique solution and a whole team of power experts. We also found that the product quality, workmanship, and flexibility that Server Tech could deliver, as well as the level of partnering with us added a lot of value. Ever since then we’ve standardized on Server Tech and the products are deployed at all of our facilities. These are simply superior products,” said Orlando.

ScaleMatrix Case Study:

100% Uptime Guaranteed

Promising 100% uptime to its customers, ScaleMatrix needed to have reliable rack power distribution and constant visibility to all available power data. They needed to have the most accurate and reliable PDUs, polled continuously for power, temperature and humidity through SPM, to a single pane of glass dashboard that the NOC team monitors, 24/7/365.

“As a multi-tenant data center, we promise 100% uptime and we’re trying to provide several things — information management, power, and cost management. Those are the three big customer concerns. In a facility like this, there are so many moving parts, like PDUs, and they just need to work. It needs to be flawless. I don’t wake up in the middle of the night anymore with calls about CDU problems. With Server Tech in place, I don’t even think about it anymore. The stuff just works. It’s one less headache to manage here in the data center. Our NOC tech leaders and our Ops group have great feedback as to what’s going on in the data center, all the time. We have the infrastructure, the redundancy, and the right technology and equipment to give our customers peace of mind,” said Orlando.

The Successful Combination: High Quality PDUs and Best in Class Power Monitoring & Management

ScaleMatrix provides a Dual Path Power Infrastructure, delivering two independent connections to each cabinet in an A+B fashion. Each independent circuit connects to Server Tech A+B PDUs, with each set of PDUs tying back to independent A+B UPS plants.

ScaleMatrix uses both Server Tech’s Switched PDUs & SPM.

Chris Orlando adds, “It all just simply works. Simple to roll out. Great functionality. Maintenance free. The Switched PDUs have On/Off/Reboot and feed data constantly into SPM. This allows our customers to not have to visit the data center because they now have more insight and visibility into what’s going on with their equipment without making those extra trips back and forth. It’s total transparency, convenience, and value for our customers, and they seem to love it. We have all of our PDUs on the SPM network. The IP address tells us which cabinet it’s in and we make sure that our customers have redundant power. We have alerts and alarms on temperature and humidity and set thresholds based on cabinet and circuit draw. We monitor live power, capacity, physical and network security, bandwidth, firewall, alerts, power and data by circuits and zones and reports, including power trending over time.”

ScaleMatrix Case Study:

Power Monitoring & Management

Software Integration with ScaleMatrix's Custom Business Management System

"We were looking for the highest quality product that gave us the most functionality both from a straight power management perspective and also from a reporting and overhead type view. SPM gives us that and more."

- Chris Orlando, CSMO/Co-Founder of ScaleMatrix

ScaleMatrix uses a proprietary business management system, custom-designed for unique features for customers and for the NOC team. ScaleMatrix worked with Server Technology to integrate SPM into their business management system.

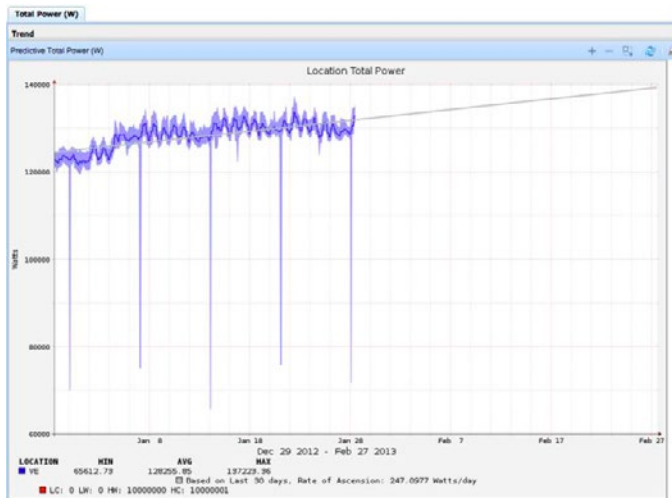
"We loved the ease of integration through the simple SPM API," said Orlando. He added, "We needed to integrate the two systems to provide data to our ScalePanel customer portal. Through SPM, we provide our customers with a single screen dashboard view where customers can drill down into their gear, aggregated into rows, cabinets, and to the PDU level in real-time. The dashboard shows them the percent of capacity used and offers remote management to reboot or cycle their equipment. Customers can see how much power is being utilized, action they're having, what's going on inside at the rack, how much room for growth they have, and if there have been any issues inside their cabinet."



Example of SPM Screen Showing Capacity Planning Report Dashboard

ScaleMatrix Case Study:

Power Monitoring & Management



Example of SPM's Predictive Trend Report Screen

The ScaleMatrix ScalePanel Client Super Portal

The mission at ScaleMatrix is to provide customers with unmatched transparency and access to their rack, equipment, and performance information – at any time – to drive peace of mind. ScaleMatrix's customers, through the Client Super Portal, have real time data to their IT environment through SPM, including:

- > Real-Time Power Monitoring
- > Predictive Trend Analysis
- > PDU Management (includes reporting and On / Off / Reboot capabilities)
- > Security/Access Monitoring & Reporting

ScaleMatrix Dynamic Density Control and the Extreme Density Center

Through its new patented infrastructure platform, Dynamic Density Control, ScaleMatrix has been able to implement much more density per data center cabinet, more than any other data center.

Chris Orlando told us, "Our customers can take what they've had in six racks at another colocation facility and put that into two cabinets at ScaleMatrix. That right there is quite a bit of power and cost savings. And our PUE is below 1.3. The cooling is in the individual rack and is adjusted depending on the thermal load in that rack, and we can support between 20kw to 30kw in each cabinet. We offer DDoS mitigation (denial of service protection) and can easily withstand a high DDOS attack because of the technology and systems we have in place. We're currently in beta testing with our newest infrastructure technology, the Extreme Data Center. We're offering 50kw-60kw per cabinet for extremely computational and high performance computing customers. Of course, we'll use Server Technology PDUs to power it all."

ScaleMatrix Case Study:

Power Monitoring & Management

Partnering with a Power Expert

Through the years, and seven different data centers, Server Technology has become a true partner to ScaleMatrix, especially for power expertise.

“Server Technology makes fantastic products from a quality, capability, and innovation standpoint. But as a data center operator, one of the most important things to us is the relationship that we have with the company itself. That is one of the most fantastic things about Server Tech – the engineering resources, the support from Sales and Sales Engineering – all the way from the executive level on down – they’re partners. They’re here helping and participating in our decision making and providing resources when we need it. It’s a true partnership. Server Tech is involved in decision making and forward planning from an inventory readiness standpoint to customization of products. The Switched units were specially designed for us, and they fit perfectly in our racks. When we call Server Tech and say we’re going to have a big quarter, we coordinate our efforts so we’re always hitting our deadlines. They’re the ideal model of a partner. We’re a fast growing business with a lot of change happening on a day-to-day basis and Server Tech is responsive and helps us grow. They’ve allowed us to reach new heights. It’s allowed us to minimize overhead from a cost and management standpoint by providing a better value and product offering for our customers with more features and more flexibility.”

- Chris Orlando, CSMO/Co-Founder of ScaleMatrix

Server Technology’s power strategy experts have provided power solutions for labs, data centers, and telecommunications operations for 30 years. Over 60,000 customers around the world rely on our cabinet power distribution units and award winning power management solutions to reduce downtime, facilitate capacity planning, improve energy utilization, and drive efficiency. With the best quality, best technical support and most patents, Server Technology products provide uncompromising reliability, innovation, and value for the datacenter.

Only with Server Technology will customers **Stay Powered, Be Supported & Get Ahead** — www.servertech.com



Server Technology
Quality Rack Power Solutions



Stay Powered



Be Supported



Get Ahead

HEADQUARTERS NORTH AMERICA

Server Technology
1040 Sandhill Drive
Reno, NV 89521
United States
Tel: +1.775.284.2000
Fax: +1.775.284.2065
sales@servertech.com
www.servertech.com
www.servertechblog.com

WESTERN EUROPE, MIDDLE EAST & AFRICA

Server Technology
Fountain Court
2 Victoria Square
Victoria Street
St. Albans, AL1 3TF
United Kingdom
Tel: +44 (0) 1727 884676
Fax: +44 (0) 1727 220815
salesint@servertech.com

CENTRAL EUROPE, EASTERN EUROPE & RUSSIA NIEDERLASSUNG DEUTSCHLAND

Server Technology
42119 Wuppertal
Germany
Tel: +49 202 693917 x0
Fax: +49 202 693917-10
salesint@servertech.com

APAC

Server Technology
Room 2301, 23/F, Future Plaza
111-113 How Ming Street,
Kwun Tong, Hong Kong
Tel: +852 3916 2048
Fax: +852 3916 2002
salesint@servertech.com