

GROWTH

Pension Fund Colocation Data Center Leverages EcoStruxure™ IT to Drive Economic Growth

Retirement Systems of Alabama

With 2.6 megawatts of backup power, 300 racks and customers ranging from PGA golf courses to some of the best healthcare institutions in the state, the Retirement Systems of Alabama (RSA), the administrator of the state's pension fund, is perhaps one of the most unlikely owners of the most efficient, resilient colocation data centers in North America.

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EcoStruxure IT Advisor is part of the Apps, Analytics & Services portfolio of the Schneider Electric IoT enabled architecture: EcoStruxure IT.

Background

RSA supports state of Alabama employees by seeking and securing investments and services that will grow retirement income, and by helping members to prepare for an enjoyable and successful retirement. Among their many real estate investments is a state-of-the-art colocation data center facility which, besides offering its tenants high availability performance (the facility has not experienced downtime since its inception six years ago), serves as a business hub that offers high tech job opportunities and economic development to local residents.

Since the colocation facility's ability to attract clients is dependent upon a solid reputation for maintaining system uptime, RSA staff wanted to make absolutely certain that the facility housed the most resilient power and cooling infrastructure available. They decided to turn to Schneider Electric, not only to provide the necessary hardware, but to also deploy IoT enabled architecture EcoStruxure™ IT to support the deployment of cloud-based monitoring tools.

According to Jeff Gardner, RSA's critical facility manager, "The reason behind building and running this data center here in Montgomery, was to convert the dollars invested by retirement fund members and their families into something that would still be here when the current and next generation of workers retire. We call this 'future-proofing' and the technology we select for the data center is a big part of it."

Goal

Maintain a profitable, zero-downtime environment across a 44,000 square foot data center.

Story

Retirement Systems of Alabama (RSA) funds and operates a colocation data center that is driving growth of jobs and the local economy. With a reputation staked on high availability, data center performance relies on a failsafe power, cooling and communications infrastructure architecture.

Solution

Schneider Electric offered standardized UPS, cooling and power distribution systems along with an EcoStruxure™ IT architecture that enabled cloud-based advanced remote monitoring and alarm management.

Results

- "Off hours" monitoring and troubleshooting work was reduced to minutes instead of hours.
- Enhanced peace of mind for IT and administrative staff knowing that Schneider Electric Service Bureau experts were acting as an extra set of eyes and monitoring the data center on a 24/7 basis.

Resilient data center supports core Alabama state functions

Since the 44,000 square foot colocation facility hosts a diverse group of customers that includes hospitals and universities from across Alabama, TV stations, courthouses and government services from across the state and even Emergency 911 services, uptime and visibility to data center assets have emerged as top priorities for Gardner and his team.

“As critical facility manager I’m focused on the power, cooling and security of the complex,” said Gardner. “We have invested in building a highly secure, highly redundant SOC2, Type 2 certified data center facility and have redundancy from the street level all the way up to our humidifiers. We have now operated for six years with zero downtime. We host 1600 kW of Uninterruptible Power Supply (UPS) capacity and have 22 minutes of battery run time to handle short outages or to help serve as a power availability bridge if a longer power outage were to occur. If faced with an extended blackout, we have two 2600 kW generators and enough fuel to run them for days. This adds up to a world-class high availability environment.”

Schneider Electric as the “go to” partner for uptime management and monitoring

“We have over 800 devices in our data center that we need to monitor 24/7. In such an environment the only way we can keep things running is to simplify operations as much as we can. For this reason, we have embraced a one-vendor philosophy for each of our key operational areas. And when it comes to data center power, cooling and monitoring, for us it’s Schneider Electric all day, from the ground up. We trust Schneider Electric products from the UPSs, to the precision air coolers, and even down to the intelligent power strips in our data center racks.



The Schneider Electric equipment is the simple way to get the job done. We have one point of contact. We provide the connectivity to our clients and Schneider Electric helps us to perform that task by providing us with the reliability. For us, there’s no connectivity without reliability,” said Gardner.

In addition to standardizing on Schneider Electric hardware and software, Gardner also benefited from an architecture that Schneider Electric put into place called EcoStruxure IT, that provides a wholistic view of data center operations and helps all of the pieces to work together in a seamless manner.

“In the past we had limited visibility to trending. We couldn’t tell how hot or cold our data center was at any given time in any location. This made it difficult for us to anticipate whether we were beginning to experience any problems or changes within our data center environment. All that changed once we put into place the EcoStruxure IT architecture and the accompanying monitoring software,” he said.

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— Jeff Gardner,
Critical Facility Manager,
RSA

“Now, regardless of whether the equipment in question is our Megawatt UPS, our NetBotz camera and rack access security systems, InRow™ rack-based cooling units, InfraStruxure smart PDU units, or Uniflair precision air handlers, we can use software tools such as the EcoStruxure IT app to figure out where we are from a performance standpoint, any time of the day and up to the minute. And we can access all of this information remotely, from a simple smart phone. This has changed the lives of me and my staff.”

Digitized solutions generate much quicker response times

EcoStruxure IT, which is hosted on the cloud-based Microsoft Azure Platform, connects disparate data center and IT systems to enable operators to remotely, rapidly and securely scale management ecosystems while harnessing insights from a proprietary data lake of over 100 billion data points. This architecture provides global real-time visibility and predictive analytics across the entire hybrid IT environment, optimizing operations across IT and facilities.

In Gardner's case, the entire approach of managing a 44,000 square foot data center is now much easier. “It's a good feeling to know that your data center is in a safe spot. You can pick up your smart phone and see every device in there and you can

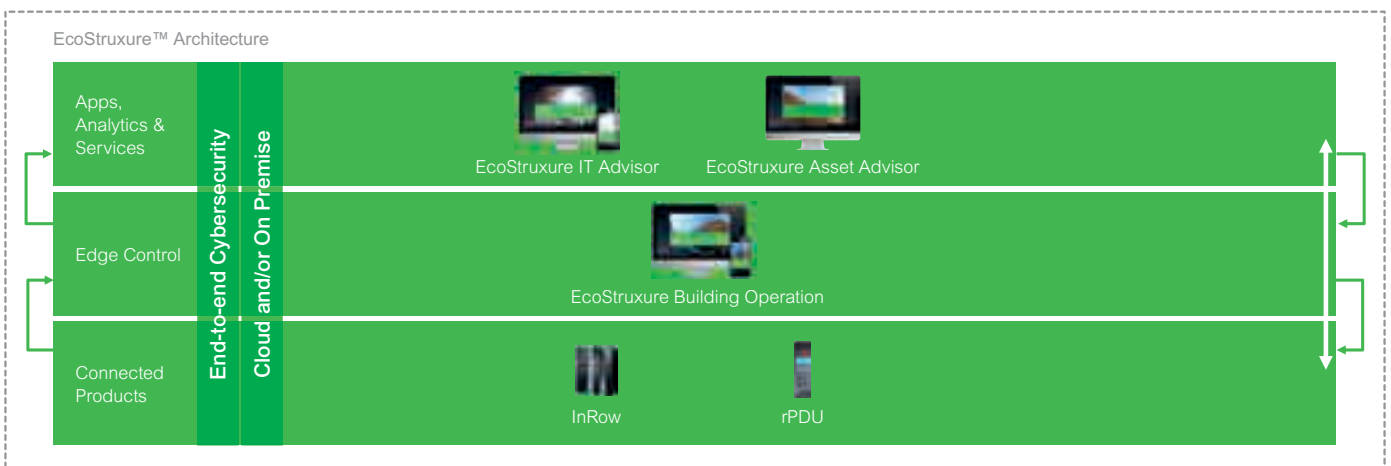


check its status. Peace of mind knowing that you have reliable power and cooling infrastructure in place is one thing; but being able to monitor the data center and look at it as a whole brings in an entirely new level of stress relief. Thanks to the EcoStruxure IT architecture, I don't have to stop my car and hotspot VPN, taking 5, 10, or 15 minutes before I can access the information I need. I can now just pick up the phone, visualize the current status of what's going on, and quickly assess activity and equipment behavior over the last 24 hours. Such capabilities allow our staff response time to drop down to practically zero minutes,” he said.

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RSA

EcoStruxure™ Innovation At Every Level **for Data Center**





Experienced technical support accelerates mean time to repair

For tech support, Gardner and his team chose to enlist the services of the Schneider Electric Service Bureau. The EcoStruxure Asset Advisor service provides them access to a team of on-call technical experts empowered with real-time data. “Once I enlisted the Service Bureau, I no longer needed to call general tech support to dispatch a technician. When we do have an incident, our Service Bureau representatives already know the serial number of the unit, they know my address, they know my phone number. I don’t have to go over any of that

with them. With real-time data, we can focus on troubleshooting right away. Then they handle everything for us, from the dispatch, to the ordering and delivery of parts. Such time savings are valuable and immeasurable in our high criticality environment,” he said.

Work/life balance regained

“EcoStruxure IT technologies have improved my quality of life away from the office. Whereas before I’d have to leave a ball game or my family at home during off hours, now I just pick up my phone and perform a quick appraisal and assessment. Then I turn off the light...my wife likes that,” he concluded.

“At the end of the day we are here to be proactive. The EcoStruxure IT architecture provides us with the capabilities of doing just that.”

— Jeff Gardner,
Critical Facility Manager,
RSA

EcoStruxure™

Innovation At Every Level

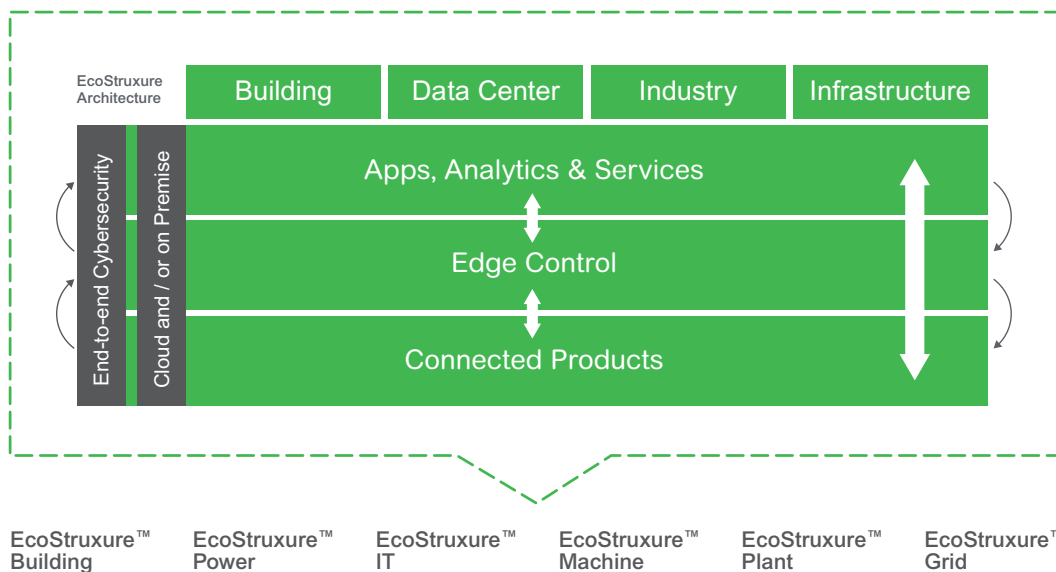
IoT-enabled solutions that drive operational and energy efficiency

EcoStruxure is Schneider Electric’s open, interoperable, IoT-enabled system architecture and platform.

EcoStruxure delivers enhanced value around safety, reliability, efficiency, sustainability, and connectivity for our customers.

EcoStruxure leverages advancements in IoT, mobility, sensing, cloud, analytics, and cybersecurity to deliver Innovation at Every Level including Connected Products, Edge Control, and Apps, Analytics & Services. EcoStruxure™ has been deployed in 480,000+ sites, with the support of 20,000+ system integrators and developers, connecting over 1.6 million assets under management through 40+ digital services.

One EcoStruxure architecture, serving 4 End Markets with 6 Domains of Expertise



Connected Products

The Internet of Things starts with the best things. Our IoT-enabled best-in-class connected products include breakers, drives, UPSs, relays, sensors, and more. Devices with embedded intelligence drive better decision-making throughout operations.

Edge Control

Mission-critical scenarios can be unpredictable, so control of devices at the edge of the IoT network is a must. This essential capability provides real-time solutions that enable local control at the edge, protecting safety and uptime.

Apps, Analytics & Services

Interoperability is imperative to supporting the diverse hardware and systems in building, data center, industry, and grid environments. EcoStruxure enables a breadth of agnostic Applications, Analytics, & Services for seamless enterprise integration.

Find out more about EcoStruxure

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Learn More



Understand the benefits of cloud-based DCIM



Learn about EcoStruxure IT



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