EcoStruxure™
Innovation At Every Level

CONNECTED

Keeping school in session

Intelligent cloud-based management architecture provides anywhere, anytime visibility.

BAINBRIDGE ISLAND SCHOOL DISTRICT –
Bainbridge Island WA

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Background

The Bainbridge Island School District, located on a beautiful island in Puget Sound, is a 35-minute ferry ride from downtown Seattle, Washington. Bainbridge schools are highly-regarded and provide a world-class education to 4,000 children in grades K through 12. In order to help the school district to achieve its goal of preparing its students for the global workplace, access to information systems distributed across 11 buildings, nine different schools, one central data center, and 35 different data closets must be monitored and managed in a modern way. The technology needs to be smart enough to self-identify when a problem is imminent, so that any disruption to the classroom and its students and teachers is minimized.

"The 'traditional classroom' is quickly becoming a 'digital classroom,'" according to the school district's Network Supervisor, Alan Silcott. "Teachers rely on web-based teaching tools. Students use Chromebooks and iPads on a daily basis. School staff members depend on IP phones for basic communication. The demand for high bandwidth internet access continues to increase in education environments. This is a national trend," he said.

For Silcott, downtime disrupts the learning of the students as many of the tools they use are interconnected. However, his network's system uptime is often challenged by the inclement weather that often passes over the island.

"In this area, we experience many storms with winds that reach 40 to 50+ miles per hour. When that happens, we are almost guaranteed a power outage. Our island is very wooded, so power lines are at risk when trees and branches fall. We have about 10–15 storms per year and these usually generate about 12 power outages a year," he said. Flickering power levels (brownouts) are frequent and these also disrupt the uptime of the critical computer assets.

Silcott and his team, along with school administrators, had already invested in Uninterruptible Power Supplies (UPS) for both their centralized data center and their distributed data closets. These devices provide enough power backup battery runtime to resist downtime-inducing power glitches. They also had deployed the EcoStruxure™ IT on-premise data center infrastructure management (DCIM) solution (formerly StruxureWare Data Center Expert) to help them manage their data center and remote sites.

Goal

Provide stable data center and network services across a multi-building, multi-campus school district.

Story

In a Puget Sound island environment where severe storms and power glitches are common, managing a network of one data center and 35 data closets became challenging for the resource-limited IT staff. Efficient monitoring of the physical infrastructure was required so that system uptime could be maintained.

Solution

Schneider Electric offered both the EcoStruxure™ IT app (formerly Mobile Insights) and their EcoStruxure Asset Advisor Service Bureau in order to simplify remote monitoring and alarm management on and off hours.

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
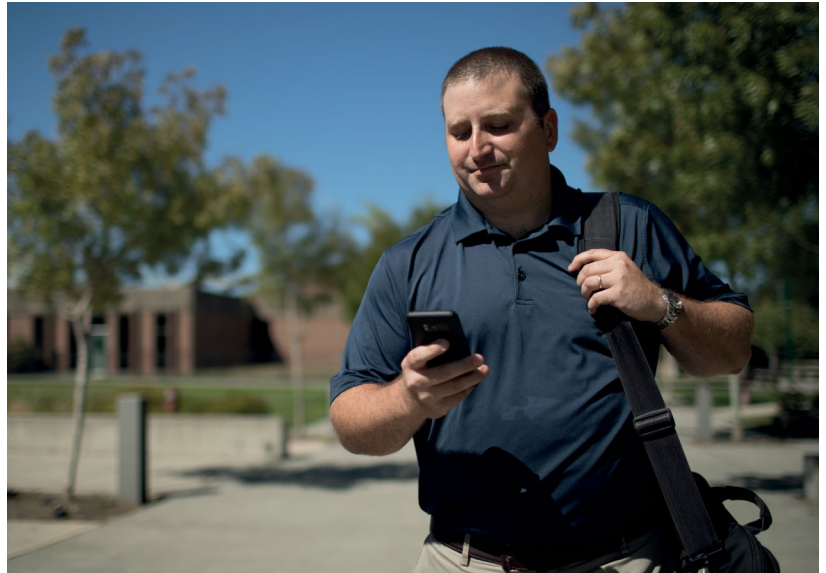
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Peace of mind and avoidance of "nuisance" alarms

With such a widespread and distributed network to manage, and with limited human resources, Silcott also needed a simple and reliable way to remotely monitor system issues. In order to keep the schools running smoothly, Silcott needed aggregated system performance information automatically channeled to him and his staff. And he needed the system to be smart enough to identify those particular situations that present a potential threat to uptime.

"Even if we experience a power flicker, all of the UPSs in the district send me a notification email. It's hard to sort through all of those to make sure that all the IT devices come back online safely. I needed a way to quickly check the status of all my data closets at any time and from any location," he said.

In fact, monitoring the network was somewhat of a cumbersome task, one which often involved remote troubleshooting after regular working hours or on weekends. "Every time there was a storm, often in the off-hours, a flood of emails would come in from all the devices. I had to figure out what actions needed to be taken. This required me to get on a computer, remotely connect to the district, and launch the EcoStruxure IT software. All of this took a considerable amount of time."

Since the majority of his equipment was Schneider Electric products, Silcott decided to consult with Schneider Electric to see if the company offered any solutions that would help him to remedy the situation.

Enhanced connectivity leads to improved efficiency and more family time

"I like the convenience of doing business with Schneider Electric. Their line of products have the best reputation out there for reliability," he said.

"Schneider Electric recommended their new EcoStruxure IT app that uses cloud-based software to pull all device data, irrespective of vendor, and make it available from one central smartphone app. Now my staff and I simply look at our phones for easy access to all the devices on our network. Alarms are consolidated according to relevance, enabling us to focus on the devices that are truly affected — and getting to the crux of the problem immediately. From a dashboard, we can dive right into any device or alarm to start troubleshooting on the go," he said.

"The 'traditional classroom' is quickly becoming a 'digital classroom'. This is a national trend."

*— Alan Silcott,
Network Supervisor,
Bainbridge Island
School District*

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"We know that Schneider Electric has our backs and will contact us immediately if they see an issue. The value they provide is more than just technical support, it's more about peace of mind."

— Alan Silcott, Network Supervisor, Bainbridge Island School District

"In particular, I really like the chat feature built into the mobile app," Silcott added. "I hate to talk to people in the noisy data closet or data center room. With the EcoStruxure IT app, I can simply text the Schneider Electric tech support people and all the troubleshooting conversations are recorded for future access," he said.

Silcott also engaged the Schneider Electric Service Bureau to help manage the power stability of his central data center. He likes the service bureau approach because the support he receives is hassle-free.

"If there is a problem, we need to speak to someone immediately. With many tech companies, it's hard to connect to the right person quickly. With the Schneider Electric Service Bureau, I don't have to wait on line to talk to someone, and I don't have to keep repeating to several people what the problem is. Plus, the Service Bureau

and the EcoStruxure IT app have all the UPS device serial number IDs and support contract information ahead of time every time we connect. Troubleshooting and dispatch, if required, happens immediately, reducing overall meantime to repair," he said.

Today, students cannot proceed with their school work without information technology. Schneider Electric products provide school administrators with the knowledge that if a disruption to the information systems occurs, their students can continue to learn and the classrooms will continue to operate.

"All of this makes life much easier for me and keeps me less tethered to my office. That gives me more time to spend with my own family," he said.

EcoStruxure for Data Center
Innovation At Every Level
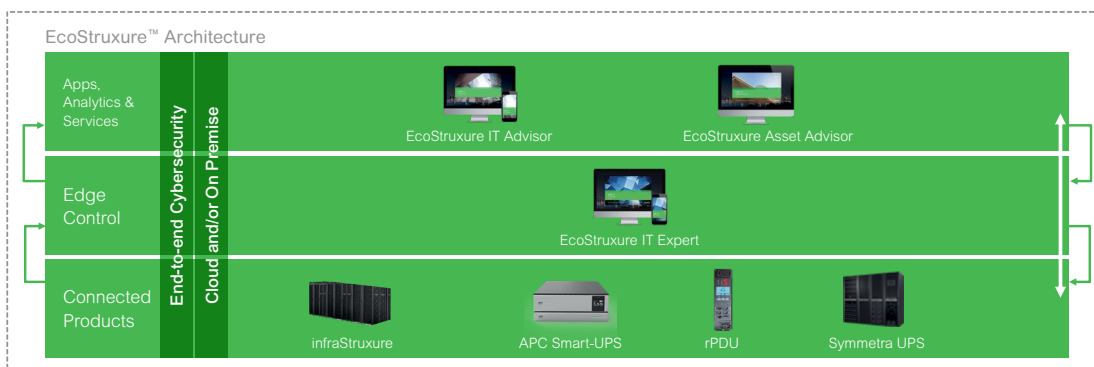
Eco Struxure™
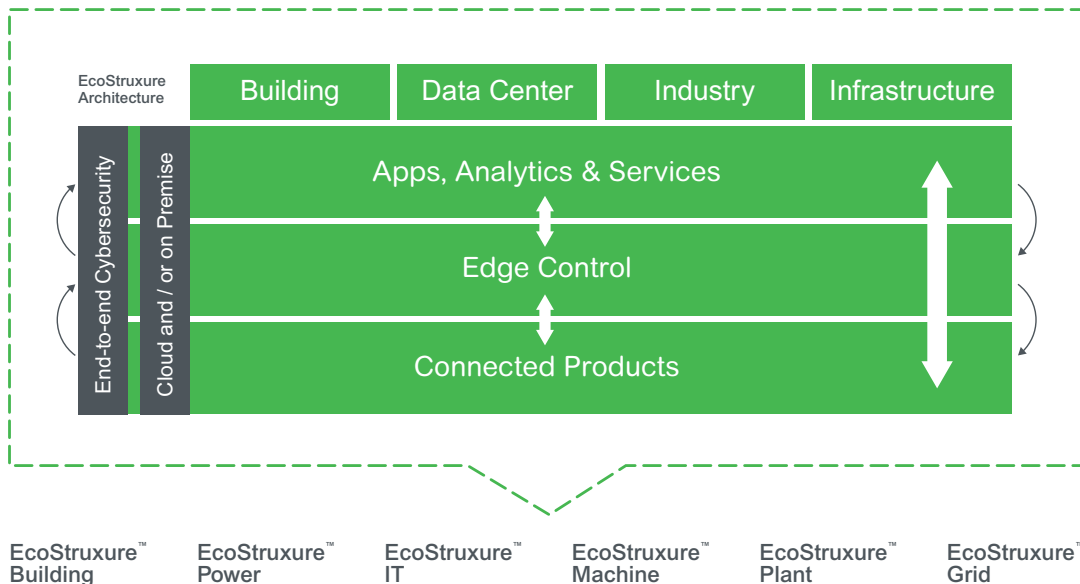## Innovation At Every Level

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

EcoStruxure Architecture	Building	Data Center	Industry	Infrastructure
End-to-end Cybersecurity / Cloud and / or on Premise	Apps, Analytics & Services			
	Edge Control			
	Connected Products			

EcoStruxure™ Building | EcoStruxure™ Power | EcoStruxure™ IT | EcoStruxure™ Machine | EcoStruxure™ Plant | EcoStruxure™ Grid

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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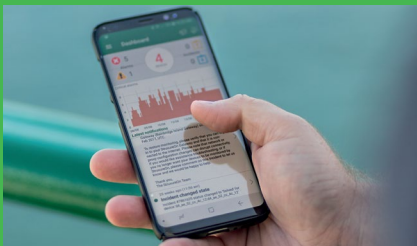Life Is On | Schneider Electric

Learn more

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cloud-based DCIM

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