

Siemens and Vigilent Target Data Center Energy Efficiency with Thermal Optimization Solution

New reseller partnership to deliver next-gen data center cooling technology by addressing energy consumption across facility white space and chilled water plant

Siemens and Vigilent announced a reseller partnership in North America to jointly provide customers with a comprehensive and unique thermal optimization solution that addresses data center cooling challenges across the facility's white space (i.e., usable space allocated for IT equipment) and chilled water plant. The joint effort is aimed at helping data center and IT managers address the cooling challenges caused by shifting IT loads, uneven server densities, and changes in facility configuration.

By leveraging Siemens' Demand Flow solution and Vigilent's Dynamic Cooling Management System, users can significantly reduce energy consumption and improve power usage effectiveness. As a stand-alone application, Siemens' Demand Flow solution optimizes chilled water plants, reducing their energy consumption by up to 50 percent. Vigilent's Dynamic Cooling Management System matches cooling to IT load at every critical spot in the white space, significantly reducing the energy consumption of cooling units. This decreases demand on chilled water plants, allowing the Demand Flow solution to further reduce energy. The joint solution ensures optimal efficiency at part load operation, leading to maximum energy savings.

"It's really a 1+1=3 scenario. Increasing chilled water plant efficiency is one piece of the puzzle and improving cooling performance in the white space is the other," explained Douglas Ryan, Head of the North America Center of Competence, Data Centers, Siemens' Building Technologies Division. "Optimizing both aspects leads to even greater savings than each solution individually. By combining our Demand Flow solution's strengths with Vigilent's technology, we provide end-to-end thermal optimization that delivers the next generation of data center cooling technology."

Traditional cooling management techniques—including simple chiller controls and individual unit or networked controls provided with computer room cooling equipment—do not address a data center’s unique cooling complexities, resulting in increased risk, reduced efficiency and wasted capacity. In contrast, the combined Siemens and Vigilent offering uses powerful software to resolve complex problems and optimize facilities in real time.

“As much as 40% of data center cooling capacity is underutilized because IT organizations haven’t had all the tools they need to fully understand and optimize cooling systems,” explained Dave Hudson, Chief Executive Officer of Vigilent. “Changes in IT load and facility configuration make cooling extremely challenging to manage. Together with Siemens, we can meet this challenge while providing an attractive and easy-to-measure ROI to our customers.”

Vigilent delivers a Dynamic Cooling Management System that uses machine learning software, a wireless mesh network of sensors, and cooling unit controls to automatically match white space cooling to IT load in real time. The system delivers immediate and measurable improvements in thermal service level agreement attainment, energy use, and cooling capacity. Vigilent also delivers Prescriptive Analytics that inform management decision-making around reliability, efficiency, and capacity.

Siemens offers a comprehensive portfolio of services and solutions that can be tailored to address customers’ data center needs in the areas of power, cooling, energy management, physical security, fire safety, IT, and facility management. Backed by the company’s global depth and expertise, Siemens’ solutions are implemented and supported by local Siemens teams dedicated to keeping data centers up and running 24/7—helping customers to meet current goals, while positioning them to grow and address tomorrow’s challenges.

Demand Flow is a trademark of Siemens and/or its affiliates in some countries. Dynamic Cooling Management is a registered trademark of Vigilent Corp.

[Vigilent Corp.](#) (Oakland, Calif.) is pioneering the use of IoT, machine learning, and prescriptive analytics to deliver dynamic cooling management in mission critical environments. Vigilent reduces operating costs, unlocks stranded capacity, and increases reliability in hundreds of data center and telecom facilities worldwide. Our mission is to increase the profitability of our customers and create a more sustainable planet.

[The Siemens Building Technologies Division](#) (Buffalo Grove, Ill.) is the North American market leader for safe and secure, energy-efficient and environment-friendly buildings and infrastructures. As a technology partner, service provider, system integrator and product vendor, Building Technologies has

offerings for fire protection, life safety and security as well as building automation, heating, ventilation and air conditioning (HVAC), and energy management.

[Siemens Corporation](#) is a U.S. subsidiary of Siemens AG, a global powerhouse focusing on the areas of electrification, automation and digitalization. One of the world's largest producers of energy-efficient, resource-saving technologies, Siemens is a leading supplier of systems for power generation and transmission as well as medical diagnosis. With approximately 348,000 employees in more than 190 countries, Siemens reported worldwide revenue of \$86.2 billion in fiscal 2015. Siemens in the USA reported revenue of \$22.4 billion, including \$5.5 billion in exports, and employs approximately 50,000 people throughout all 50 states and Puerto Rico.

To receive expert insights [sign up for Siemens' U.S. Executive Pulse leadership blog](#). Follow Siemens on [Facebook](#) and Twitter at www.twitter.com/siemensUSA.

Contact for journalists

Allison Britt, Siemens

Phone: 847-941-5724; Email: allison.britt@siemens.com

Pamela Crowley; Vigilent

Phone: 408-529-9655; Email: pcrowley@vigilent.com