



MAKING THE GRADE: DRIVING ENERGY INSIGHTS AND EFFICIENCY ACROSS A STATEWIDE CAMPUS SYSTEM



To maximize energy efficiency on separate campuses across their state, this community college system needed real time data on energy consumption and improvement options. To achieve that, it first required a uniform software platform able to provide critical dashboarding and analytics to the network's full facility automation system.

ROVISYS

To eliminate these blind spots in the school's system and to develop the UX it needed to monitor and control energy-intensive building systems, the school needed a partner with a unique range of capabilities. The successful contractor would require deep HVAC Control and analytics expertise, proven mastery of the Tridium Niagara platform that controlled the campus system, and the engineering strength to run an operation as complex as this.

RoviSys Building Technologies made the grade for this project. Numerous engineers on staff had more than a decade of experience in project management, control system deployments, Tridium Niagara implementations, and physical layer installations. Plus, a company-wide status of a Certified Tridium systems integrator ensured that standards and best-practices were met.



This community college system was in the midst of an aggressive improvement plan, pursuing a strategic vision that included infrastructure overhauls, improved energy efficiency, and a goal of tripling the credentials students earn in academic & workforce areas. This means it must find a precise balance between lower resource consumption and increased building activity.

To do this, the school required deep insight into the current state of its facilities and a new mechanism to automate efficiency through the transition.



THE PROBLEM

With nearly 100 buildings stretched across more than twenty separate campuses, automating building controls held the promise of hefty bottom-line savings for the community college, and it had taken an essential first step with standardization of building control systems into Tridium Niagara. This was a start towards maintaining high standards in building use and efficiency, however, the solution was incomplete. There were issues to overcome before the strategic vision could be met.

The primary problem was that the current system provided the school with no way to accurately determine how much energy each branch or in each room in any of its buildings was actually consuming. Operators were without the data they needed to identify opportunities for efficiency improvements or savings. Uniform decision making across campuses was impossible.



THE SOLUTION

The RoviSys Building Technologies team's first objective was to complete a comprehensive evaluation and develop a clear understanding of the underlying IT infrastructure, as well as thorough documentation of all existing

automation components. With this information, the company was able to make detailed recommendations for key updates and changes to the system necessary to achieve the intended results and deliver a full implementation plan for the project. Timelines and schedules, as well as best practices and standardization recommendations were included.

Once this was completed, RoviSys engineers added top layer dashboarding and Niagara analytics software element into the solution. This crucial piece defined the user interface for the system and established fault detection and diagnostic rules, which helped build efficiency straight into the heart of the automation system.



THE RESULT

With this system in place, the school finally achieved the insights it needed to improve its energy efficiency even while expanding activity across its campuses. The design automatically identifies major equipment faults and alerts operators to energy usage inefficiencies. The solution provides operators with powerful, closed-loop insights into real time energy use and needs and gave them the ability to identify and correct specific problem points in any of the buildings across its network.

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