

EMS Case Study *University of Kansas Student Union*



“EMS Scheduler” HVAC Interface Saves University of Kansas Student Unions \$20,000+ Yearly

Facility heating and cooling automatically adjusts based on event data from EMS Enterprise

Background

Founded in 1864, the University of Kansas (KU) has its 950-acre main campus in Lawrence. Two union buildings serve the more than 26,000 undergraduate and graduate students that attend KU. The Kansas Union, dedicated to the memory of the 130 KU students who died in World War I, was completed in the mid-1930s.

The idea for the Burge Union, a satellite facility on the west side of campus came from students and union staff, and it began operating in 1979. Today, the two facilities function as the living rooms of the campus, serving the social, cultural and recreational needs of students and staff.

An Insightful Question Gets the Wheels Turning

In 1999, administrators at the Kansas and Burge Unions were looking into changing energy management systems for their facilities. As part of their research, a group visited the KU Facilities Operations department to check out the new Johnson Controls Metasys® system that they had recently installed. In the course of discussions there, Wayne Pearse, Union building engineer, asked an insightful question that would ultimately lead to a mutually beneficial linking of two seemingly unrelated

systems. “I noticed the Start/Stop schedule in Metasys and asked if it could be tied into the EMS reservations program,” says Pearse. “Nobody knew the answer, of course, because it had never been done.” However, people were intrigued.

At that time, the Air Handling Units (AHUs) that heat and cool rooms in the Unions were activated manually each morning by an employee. Those AHUs would then run until the Union buildings closed, some 18 hours later, regardless of how many events were scheduled in that area. At midnight, another employee had to make the rounds in the buildings and turn the AHUs off. Not only was it a labor-intensive process, it was one in which there was great potential for error, leaving the meeting and event scheduling staff with an ever-present concern that something might be overlooked. None of them wanted to receive a call from an angry reservation holder whose room was not properly heated or cooled.

Fast Facts

- “EMS Scheduler” HVAC Interface saves KU **700 hours/year** in labor
- KU saves **\$13,000** in electrical costs in the first six months

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A Well Designed Solution Leads to Significant Savings

To explore the possibility of an EMS/Metasys interface, Johnson Controls, which was bidding on the work at the Unions, contacted Streamside Solutions, an engineering firm that specializes in energy management systems. Brian Russell, president of the company and a former Johnson Controls engineer, was very familiar with the Metasys product. In just over a month, Russell wrote and tested the new “EMS Scheduler” interface, and in January, 2000 he installed it in the Kansas Union to rave reviews. “When he brought the EMS Scheduler in, it worked without a hitch,” says Pearse. “I went through a one-hour training session with Brian and our staff took it from there. He made it very easy to understand and control.” More recently, the EMS Scheduler was connected to the heating and cooling system at the Burge Union with similar results.

While cost savings associated with the EMS Scheduler interface are not calculated on an ongoing basis, they are sizeable. “We saved \$13,000 in electrical costs in the first six months of using the system in the Kansas Union,” says Pearse. “And the system saves us approximately 700 hours per year in labor.” Asked to rate the success of the EMS Scheduler project, Pearse says, “It met both of our goals: The interface took the human element out of the heating/cooling equation allowing for better customer focus and it provides major savings in energy consumption.”

Gene Wee, reservations coordinator for the KU Memorial Unions, agrees that the system has had a positive impact on customer service and on the stress level of the reservations staff. “Kansas is a four-season region, with a number of sub-zero days in the winter and 100+ degree days in the summer, so heating and cooling are important issues for our guests,” he says. “With the EMS Scheduler interface, we have the confidence of knowing that the room temperature will be set right. No more situations where a room is uncomfortable because we ‘got busy and forgot to turn on the air!’”

Looking Ahead

Today the collaboration between the Kansas and Burge Unions and Streamside Solutions continues, with enhancements making the EMS Scheduler interface even more powerful and user-friendly. And while it was written to work with a Johnson Controls product, Brian Russell points out that it could be modified to interact with any system that has an open interface, making the kinds of energy and labor savings experienced at KU widely available to facilities that use EMS scheduling products.

For more information on Dean Evans & Associates, and the company’s event management and master calendaring software products, go to www.dea.com or contact the Sales department at sales@dea.com or 1.800.440.3994 ext. 863.

