

ABOUT THE CUSTOMER

The Prairie Grove School District is located in the town of Prairie Grove, Arkansas. The town has a population of 5,000 and the school district serves over 1,700 students from Pre-K to 12th grade within its four school facilities.

PROJECT REQUIREMENTS

Ross Ward with Northwest Controls and Jack Cornwell with BACspace had an opportunity to gain a customer but they had what they were concerned might be an unsolvable problem. They contacted S4 looking for solutions. They were looking for a BACnet interface to connect the customer's existing controls and they wanted to make sure that we had a viable solution before moving forward with the project. The building to be upgraded contained about 34 Net/X N2 compatible communicating thermostats. There were also a few UNT and AHU modules but they were not sure of the application details for these systems.

The school district uses DDC Controls to help conserve energy usage and as a maintenance tool for supporting their HVAC Equipment. As is typical for many projects, Northwest controls had a tight budget to work with to be competitive bidding on the school's work and to earn their business. They needed a cost efficient solution to enhance the schools HVAC control system that preserved and leveraged existing investments in technology. Replacement of existing controls and thermostats was not an option.

SOLUTION

S4 assured Jack and Ross that as long as these are N2 compatible stats there would be no problem supporting the project with the S4 Open: BACnet-N2 Router as long as the devices they wanted to use as their operator workstation and global controller were BACnet/ IP compliant. The Net/X N2 communicating thermostats are designed for new or replacement commercial or residential conventional applications where the Johnson Controls (JCI) N2 protocol is required. The TEC-N2 thermostats are direct drop-in replacements for the Johnson Controls TEC1101-1, TEC1102-1, and TEC 1103-1 thermostats. See <http://www.networkthermostat.com/products/wired-n2-thermostats> for more details. That means that they will look like Vendor (VND) devices and because they are plug compatible with the JCI TEC stat family the Device Templates provided in the BACnet-N2 Router template catalog will provide the required device point mapping without any development investment. Northwest Controls would need to manually assign our device type template to the devices. That is a standard process for VND devices and only takes a few seconds.



Even though this is not a large project, it showcases a number of the unique capabilities of the BACnet-N2 Router and solves both technology and business issues for the school district. Since there was not an operational Metasys® supervisory controller or operator workstation, the Upstream N2 Interface option was not required.

Northwest Controls installed the S4 Open: BACnet N2 Router without assistance or training from The S4 Group, simply by following the guidance provided in the Getting Started Guide and User Manual provided on the support CD. The Configure Wizard found and identified each N2 device. The UNT and AHU devices were interrogated and

the proper Device Template reflecting the application loaded in each device was assigned. Northwest Controls manually assigned the appropriate TEC Device Template as previously instructed. At this point, each N2 device was being published to BACnet/IP as a virtual BACnet device under a virtual BACnet Network.

Northwest Controls then added their own value to the project utilizing Alerton's Envision for BACtalk as a BACnet Operator Workstation and Alerton's BACnet controllers for the build expansion. In a very short time the building was under control and a more streamlined and more powerful user interface was available to the building operator.

CUSTOMER SATISFACTION

Sometimes there is power in just a few carefully selected words. When S4 contacted Ross Ward to see how the project was going the response was, "Everything worked great, Thanks for checking. The router was very cost effective, integration was easy, and it allowed us to provide great value to our Customer. We have other applications that we are targeting to use this product on to expand their integration into the BACnet world." He also said "the customer was very pleased with the enhancements the new system brought to them."

ABOUT NORTHWEST CONTROLS

Headquartered in Little Rock AR, with satellite offices in Springdale, Tulsa OK, and Oklahoma City OK, Northwest Controls is an Alerton dealer and full-service controls contractor providing building automation, automatic temperature control, process control, system engineering, system installation and service for commercial and industrial HVAC systems. For more information visit <http://www.nwcontrols.com/>.

ABOUT THE S4 GROUP

The S4 Group provides cutting-edge enabling technology that transforms building automation systems (BAS) into enterprise solutions. S4 Open Appliances attach to legacy proprietary BAS, extending systems' lifespans and greatly enhancing their value to building owners. The S4 Open: OPC-N2 Router facilitates the convergence between legacy Metasys® installations and standards-based industrial automation /process controls technology. For more information on The S4 products and capabilities contact Steve Jones at 801-621-1970 or sejones@thes4group.com