
CASE STUDY: SCHOOL DISTRICT INTEGRATION

Star Service, Inc. migrates school district with S4 Open: OPC-N2 Routers

Integration Partner: Star Service, Inc.

Technology Used: Johnson Controls Metasys® Companion / Facilitator Supervisory Panels, legacy Metasys® N2 field controllers, ASI Controls Weblink, S4 Open: OPC-N2 Router

ABOUT THE CUSTOMER

Louisiana's West Baton Rouge Parish School Board had 10 buildings with legacy Johnson Controls Metasys® installations. The Metasys® infrastructure was originally installed as each school building was constructed or remodeled. Remote access had been implemented with dial up technology to each building from a central site. In some cases, these systems were in excess of 15 years old, with little maintenance performed in recent years.



CUSTOMER REQUIREMENTS

The school district's central site failed, and many of the dial-up links to school buildings were no longer operable. To make matters worse, many of the local control systems were permanently overridden to an "on state" using energy 24-7 instead of only during occupied hours. Even basic occupant comfort needs were not being met in some areas while other were being over conditioned. The school district called in the team from Star Service, Inc. to solve the occupant comfort problems and conserve energy at the same time.



The school district needed a cost effective solution that addressed restoring central energy monitoring and adding real time management capability. The district was looking towards the future, setting the stage for adding energy savings capabilities. The school district wanted these goals met within a tight school year budget.

At the Port Allen High School alone, the school board was facing a \$500,000 to \$600,000 cost to replace the entire HVAC system due to difficulty in maintaining and repairing the existing system. Contractors claimed that the obsolescence of parts and aging systems allowed no other option. Classroom temperatures ranged from 64 to 78 degrees.

SOLUTION

Star Service was called in to fix the problem and to provide a more energy efficient solution. Star Service proposed an all-inclusive, fixed-cost service agreement to assume the responsibility for preventative maintenance, repairs and equipment replacement for a fraction of the cost. Board members opted for this approach because Star assumed all risk for repairs and replacement of equipment, if required. The first part of the solution was to eliminate the Johnson Controls legacy Metasys® supervisory controllers and replace them with ten S4 Open: OPC-N2 Routers, one in each of 10 schools across the parish. At a few locations, new ASI Controls were installed. These schools are in a 25 mile radius of each other. The routers communicated with a central ASI Controls Weblink server, located at the school board office. OPC support was a requirement as the routers needed to interface into

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an existing ASI Weblink front end. Weblink provides a graphical user interface, real time and historical data trending, and control of every building in the district from any authorized user with a web browser.

CUSTOMER SATISFACTION

With respect to cost effectiveness, there were no other solutions even close to the price / value of what was proposed. The S4 Open: OPC-N2 Router set the stage for migration of the district's building automation system away from Johnson Controls Metasys® legacy N2 devices over a period of years, on the district's schedule and within their budget. The school district has met their goals of getting control of their energy usage in the short term without sacrificing occupant comfort.

Reference video from http://www.youtube.com/watch?v=Rsudo2leFKU&feature=player_embedded Here is the link on the Star Service Site <http://www.star-service.com/case-studies/Port-Allen-High-School>

This video describes the recommissioning of the system at Port Allen High to its original design and the extensive refurbishment required to bring systems to their proper working capacity. As a result, the electrical consumption was reduced by 28% and the classrooms were restored to a consistent temperature throughout the building. The learning environment was greatly improved and the total repair and maintenance cost was eliminated.

ABOUT STAR SERVICE

Star Service is a full service mechanical contractor, specializing in Preventive Maintenance and Turn-key Installation of HVAC systems. We can guarantee the costs associated with your mechanical systems throughout their lifecycle.

Star Service has [locations](#) throughout the Gulf Coast Region including [Baton Rouge, LA](#), [Houston, TX](#), [Jackson, MS](#), [Jacksonville, FL](#), [New Orleans, LA](#), [Mobile, AL](#), [Lafayette, LA](#), and [Lake Charles, LA](#).

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