

Case Study: Metasys[®] to Schneider Electric Buildings Integration

Project Type: Integration of legacy Johnson Controls N2 Bus into Andover Continuum

Facility Type: Multi-building educational campus

Location: South of Madison, Wisconsin

Project Engineering and Implementation: Control Solutions, Inc.

Customer Requirements

The customer is in the middle of a multiple year transition from a Johnson Controls Metasys[®] based building automation system to a Schneider Electric Buildings based system. Requirements included the ability to monitor the entire campus from a unified head-end for ease of scheduling, alarming, access, etc. The customer also desired better energy use monitoring and management.

Research

Solutions Evaluated

- FieldServer SlotServer N2
- S4 Open: BACnet-N2 Router
- Complete Replacement of Metasys System

Why S4?

After evaluating the FieldServer solution it was decided that this product did not meet our requirements in regards to performance, ease of configuration, scalability, and lacked support for the range of N2 devices present at the install site. Also, we found that a complete replacement of the legacy system exceeded our client's budget at this time. In addition to being cost effective, the offering from the S4 Group met, and in many cases exceeded, our project's requirements.

Approach

Old Configuration

The building at the customer's site where the integration was planned contained:

- 3 N30 Supervisory Controllers
- 96 VMAs
- 6 AHUs
- 1 DX9100

Implementation

We replaced the three N30 supervisory controllers with three BACnet-N2 routers. After running through the auto-configure process on the router and BACnet discovery on Continuum, we were able to bring points into Andover Continuum Cyberstation from the N2 Bus. From there we could handle scheduling, alarming, access as well as handle energy usage functions. All of the rest of the existing Johnson infrastructure was left in place with the customer opting to replace the legacy controllers, as they stop working, with Andover controllers over a period of several years.

New Configuration

- 3 S4 Open: BACnet-N2 Routers replacing the N30s with the rest of the Metasys® N2 infrastructure remaining in place.
- All of the BAS data from the building is now brought into the customer's main facilities operations center.

Results

- Three months after the installation, the customer has reported a 5% increase in energy efficiency.
- Unified user interface for entire campus
- Low initial investment required from customer
- Ongoing transition from Metasys can be performed as maintenance
- Minimal disruption to ongoing building operations

About the Parties Involved

Control Solutions Inc.

Control Solutions Inc. was started 8 years ago by Jim Winkelman. Jim has 25 years of experience in HVAC and associated industries. Located in Belleville Wisconsin, CSI's main focus is primarily a service company but also handle CCTV, mechanical service, construction and any other related services a customer may request. CSI is a Schneider Andover Continuum Partner, a Pelco CCTV Representative, and a Square D Lighting Control and Variable Frequency Drive Representative. For contact information visit: <http://controlsbycsi.com/contact.html>.

The S4 Group, Inc.

The S4 Group's mission is to deliver seamless open systems integration solutions for non-IT and building automation systems. Our unique building automation solutions enable new system architectures, compartmentalization of component upgrades, clean integration with existing BAS systems, as well as building automation integration with IT systems and enterprise management systems. Our solutions enable our customers to deliver new value propositions to their clients by utilizing the S4 group technologies. To learn more visit: <http://www.theS4group.com>.