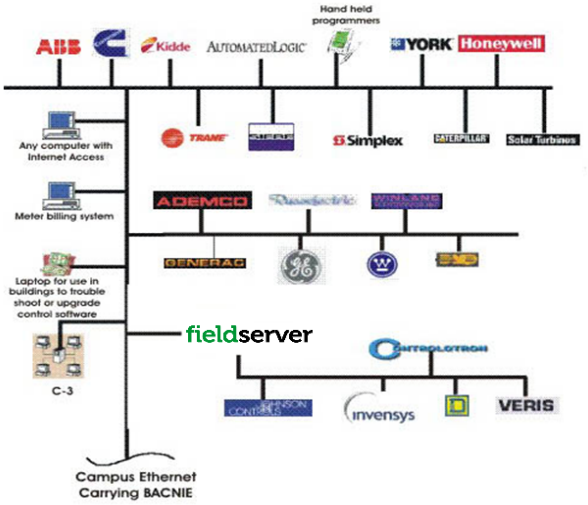
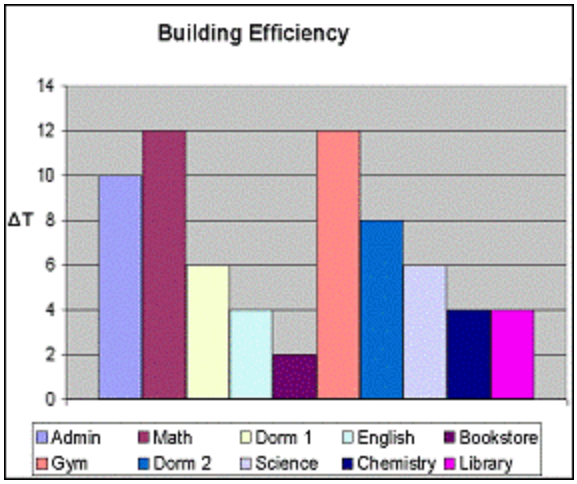
University of Arizona

Energy Management is very high on the priority list of any large establishment wishing to decrease overhead costs. When the University of Arizona in Tucson, Arizona was faced with this problem, they also realized that they must first gain access to the energy meters via the campus WAN (Wide Area Network) that was using BACnet/IP. Most of the energy meters were using Modbus protocol. Joe Branaum, Manager of Integrated Systems Group for the University of Arizona, was interested in using FieldServers to integrate energy meters into the campus SCADA (Supervisory Control and Data Acquisition). The University utilizes BACnet as their campus-wide building automation communications protocol and needed a method to integrate information from over 435 buildings to BACnet/IP.



"After evaluating several alternatives to meet this integration requirement we then performed a series of on-site testing of the devices," said Joe Branaum. "We finally decided on using FieldServer to bring the various, Modbus, LonWorks and Simplex devices into the Campus SCADA. FieldServer outperformed all other solutions and proved to be a very tried and tested solution."

While energy management controls was the initial primary focus of this integration project, the University also had fire alarm panels, utility systems and other devices that needed to be integrated to the BACnet/IP system. The University of Arizona has over 435 building in its vastly spread out Campus. Devices and systems manufactured by over 35 different vendors utilizing such protocols as Modbus, LonWorks and Simplex indicates the extent on the integration path from legacy devices into the new Web based SCADA, which is resident on the BACnet/IP campus WAN. The web based SCADA enables Engineering, Maintenance and other facilities access into the system for on-line system access from any web browser on the Campus network which will increase visibility and turnaround time for the running & maintenance of the Campus Building Automation system.



Key personnel are provided with web enabled cell phone, which allows them access in to the SCADA system, thus a technician can receive an alarm on their cell phone and use the same cell phone to trouble shoot the application. If the technician needs further information from the SCADA system a laptop can be plugs into the cell phone for full access into the SCADA system.

So far, approximately 38,000 points have been brought into the system and there are still more facilities to be integrated. The University has already shown that this integration has met their savings goal of payback in less than five years. Also, they found that they could throttle back their fans and pumps when the building was not at peak load, extending the equipment life as well as saving energy. All this information allows University management to now have successful Energy Management to drive down costs and increase building efficiencies.

About MSA Safety FieldServers

MSA Safety FieldServers are made in California. The FieldServer devision designs and markets a broad line of devices that enhance communication between various instruments, systems, machines and other devices that utilize noncompatible data protocols. The FieldServer combined with our extensive driver library makes the perfect package to achieve interoperability. Drivers included in this library are Modbus, LonWorks, BACnet, Metasys, DH+, PROFIBUS, plus drivers for fire alarm panels, controllers, and many other devices. For more information about MSA Safety FieldServers, visit the website at https://us.msasafety.com/fieldserver.

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