

Watson Clinic



Customer benefits

- Reliable, uninterrupted performance
- Total system visibility for all buildings from any terminal
- Training/support for operational self-sufficiency
- Cost-effective system scalability

Project at a glance

Project Type:

System expansion/modification

Location:

Lakeland, Fla., USA

Property:

Multiple buildings

(500,000 sq.ft. of controlled space)

Equipment installed:

- I/NET Seven™ operating system
- 11 Xenta™ 527 Web servers
- Chillers, VFDs, cooling, and surge protection units
- Powerlink™ lighting panels
- Square D™ power meters

Applications:

BAS, lighting, power metering, cooling

Installation:

2001 with expansions in 2004, 2009, 2010



On a quest to increase system performance and reliability, obtain responsive service, and enhance its operational self-sufficiency, Watson Clinic® chose Schneider Electric™ equipment and relied on Future Controls, Inc. to retrofit multiple buildings.

The challenge

Watson Clinic is a preeminent organization that has been delivering general and specialized medical services in Central Florida since 1941. In 1969, the clinic achieved national recognition by becoming the first to receive accreditation from the American Association of Medical Centers.

By 2001, though, the facilities staff faced several challenges. The HVAC systems at three of the clinic's facilities were operationally isolated from the others and exceedingly difficult to monitor and maintain.

Environmental specifications in a given area experienced unacceptable deviations. Frequent power outages required manual restarts for equipment in each building. And Watson Clinic had to rely on high-priced troubleshooting/repair experts who were not always available, forcing the facilities staff to run systems manually for days.

“The I/NET system has been very reliable (even through electrical storms). The software is user-friendly and very powerful for our troubleshooting and monitoring needs. And Future Controls’ ability to keep the system running optimally and to offer innovative, expert solutions to fulfill our building management needs has proven to be immeasurable.”

Gary Picklesimer
Asst. Facilities Director Ops.
Watson Clinic

When decision-makers sought to replace legacy systems in the main building, they knew exactly what they wanted. Watson Clinic needed reliable, easy-to-manage systems that leveraged leading-edge technology while delivering energy efficiency and robust functionality. Moreover, Watson Clinic wanted a trustworthy service partner.

A Schneider Electric partner in Central Florida proposed an innovative system solution for Watson Clinic. But technology alone could not satisfy certain requirements. So Schneider Electric representatives collaborated with decision-makers to demonstrate their commitment to establishing a responsive relationship by taking time to fully understand and address all the clinic’s needs and concerns.

Years later, when Watson Clinic wanted to build a new three-story facility, decision-makers turned to Future Controls, a longtime Schneider Electric partner, for assistance.

The solution

In 2001, Watson Clinic opted to install a Schneider Electric I/NET Seven building automation system (BAS), an integrated solution offering ease of installation, operation, integration, expansion, and maintenance.

Changes to each preprogrammed controller were both transparent and seamless to clinic personnel as each Schneider Electric component took over the job of the component it replaced. In addition, a file equalization capability reliably synchronized multiple workstations, reducing the load and dependency on a single PC or server.

In 2009, Future Controls expanded the I/NET Seven system to incorporate newer technology for all seven buildings. For example, the updated I/NET system

leverages the SQL database to automatically capture critical data on a dedicated server for access through web server scripting.

Watson Clinic can also run a variety of reports on data stored in the SQL database at anytime, using the information for troubleshooting or other purposes. For instance, staff can generate reports to provide documentation of temperatures, humidity, and pressure levels in a critical area such as a cancer clean room/lab.

Future Controls also integrated Powerlink intelligent lighting panels to provide a simple, cost-effective way for Watson Clinic to control branch circuits from an automated circuit panel board. In addition, microprocessor-based controllers manage lighting control. Integration of lighting controls through the I/NET system enables staff to set schedules and leverage Modbus™ capabilities that enable/disable individual lighting circuits.

Watson Clinic replaced the original NetPlus™ routers with the advanced technology of Schneider Electric Xenta 527 web servers. The new servers enable the facilities staff to quickly and easily monitor system status, control features such as set points and parameters, provide multiple levels of secure system access, and handle alarms and events with flexibility.

Future Controls also installed Square D power meters, allowing the facilities staff to closely monitor energy consumption on primary main distribution boards while providing valuable trending information and verification of utility bill charges. In a state known for its storms and power challenges, the new meters help Watson Clinic monitor fluctuating voltages and amperages, as well as the actual power delivered by the utility company to each facility.

Watson Clinic combines Schneider Electric technology with its own energy conservation strategies to allow a certain degree of local environmental control for occupant comfort. The BAS maintains temperature, airflow, and humidity to precise tolerances in critical areas and logs the data for regulatory documentation purposes.

The bottom line

An installation that began with three buildings in December 2001 occurred repeatedly over the next decade as Watson Clinic expanded and modified systems to automate controls in seven buildings. Today, the facilities staff can use the Internet to manage all building systems – anytime, anywhere.

Alarms and messages alert staff to even the smallest deviations from established parameters – and before compromising the comfort or safety of people or equipment. Security guards have also been trained to diagnose a range of problems routed to them via email, enabling them to help off-site operators resolve issues in real time. In the event of a critical alarm, alarm messages also route to Future Controls, enabling it to become a “first responder.”

Over the years, Future Controls has also installed or upgraded chillers, variable fan drives (VFD), units for cooling and surge protection in computer rooms, and a weather station.

In 2010, Watson Clinic signed a three-year service contract with Future Controls, enabling this service provider to remotely monitor, service, and troubleshoot Watson Clinic’s systems.

