White Papers

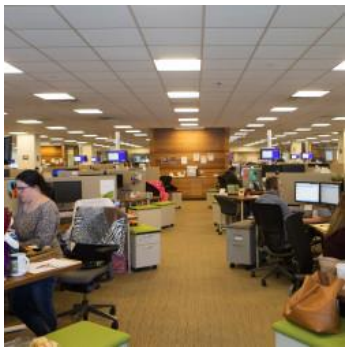
athenahealth

XL AUTOMATION
& ENERGY MANAGEMENT SERVICES

March 30, 2017

Athena Health

Introduction:



Founded in 1997, Athena Health has been a thriving electronic health record (EHR) system, for small to medium sized physician practices and hospitals. Athena Health is headquartered in Watertown, MA and currently has over 4,000 employees in six locations throughout the U.S., and two in India. Athena's applications are used by nearly 85,000 healthcare providers.

Background/Problems:

In any health care facility where patient data is stored, HIPAA laws require highly secured networks and constant monitoring of all data, which makes the security of a BACS in such an environment a top priority.

Additionally, because Athena Health has multiple campuses across several states, the consistency and the look of the BAS control system of all the buildings on all of Athena's campuses throughout different states was necessary.

With a scattered number of Athena campuses across the U.S. and India, it was important to have an open, nonproprietary system that any qualified controls vendor could service and maintain.

Because Athenahealth is rapidly growing, retrofits and new construction for their expanding company required a flexible and highly expandable system, with all information accessible from any place on their network.

Project Scope:

The scope of work to date includes multiple projects across several campuses:

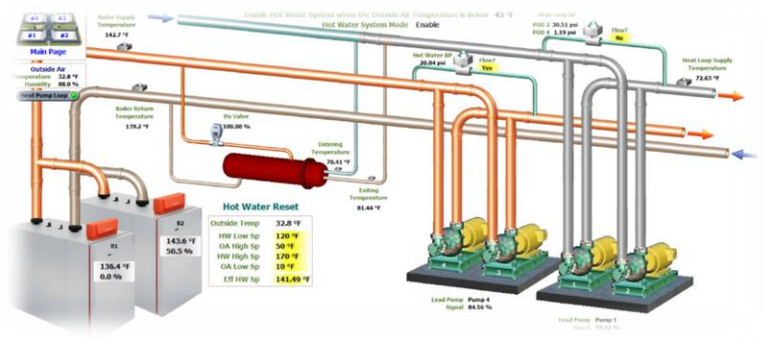
Belfast Campus: Belfast, Maine

When Athenahealth acquired the old MBNA Buildings in Belfast in 2007 several upgrades and renovations were put into a phased implementation plan. The existing BAS was a proprietary Alerton IBEX system which was no

longer manufactured or supported. Over the past 6 years we have fully upgraded the controls for 8 of the Buildings at the Belfast Campus which included replacement of the entire BAS, lighting integration, gas detection, and power systems integration.

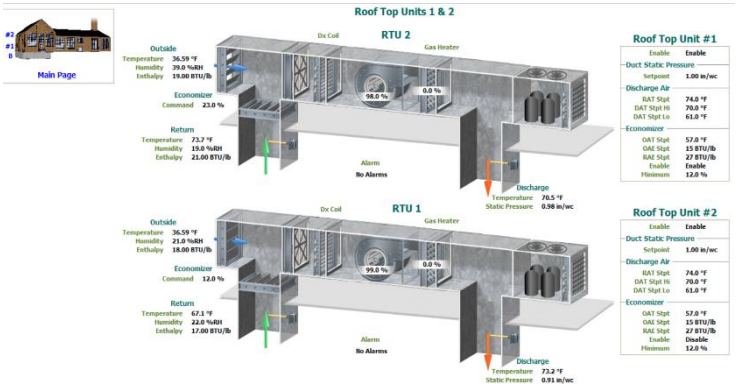
Because Athenahealth campuses have hundreds of pieces of equipment, customized 3D graphics were developed which shows all equipment, their locations, the ductwork, and

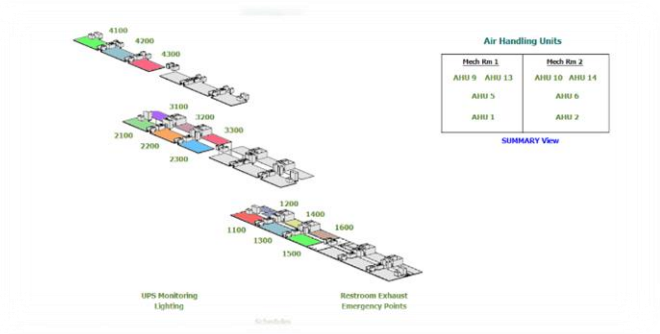
even the furniture. All this information is displayed as layers which can be turned on and off and "dimmed" to help identify what may be going on in each specific area. If someone complains to the facilities department, these customized GUI's help them quickly identify what piece of equipment serves the area where the complaint is coming from. Equipment has also been implemented with "service tag" graphics, which give the Md# and Ser# for each piece of equipment, as well as information such as filter and belt sizes and any known issues with the equipment. These features were implemented across all buildings on all Athenahealths campuses.



Arsenal St. Campus: Watertown, Massachusetts

The Watertown Arsenal campus is a historic site established in 1816 that includes multiple buildings that sit on the north shore of the Charles river. The site has more than 25 buildings ranging from 2 stories to 5 stories. The largest building onsite is located at 311 Arsenal St. which is 5 stories totaling over One Million square feet. Currently half of the 311 building has been renovated and upgraded with new Open and Non-Proprietary Building Automation systems.



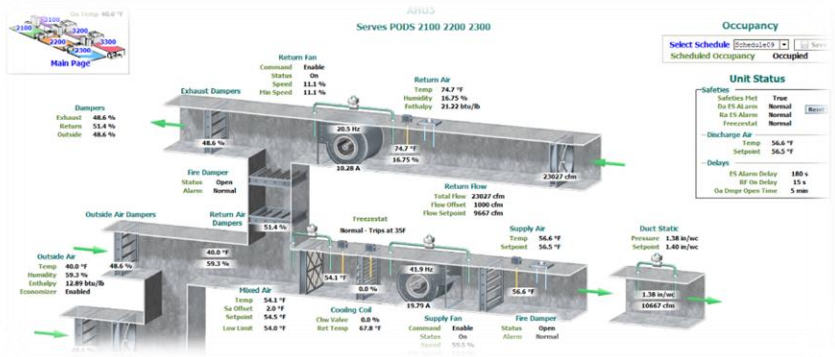


To date XL Automation has provided, installed, programmed and maintained controls for 22 different projects on the Watertown campus with 3 more projects scheduled for this year.

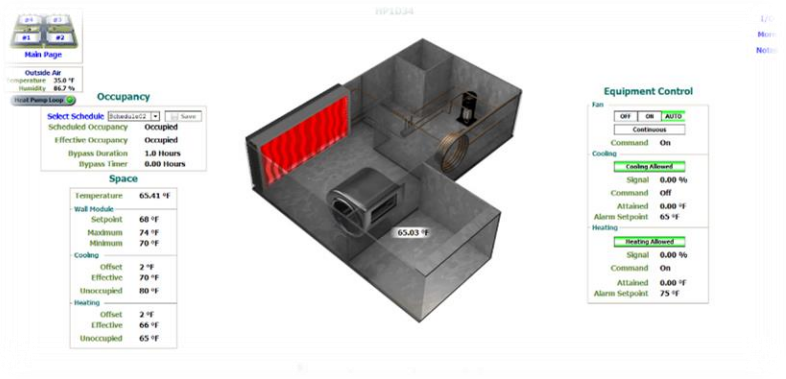
The Watertown campus now has well over 600 pieces of equipment including boilers, chillers, exhaust fans, Air Handlers, VAVs, lighting and more, on the Tridium Open BACS.

Conclusion/End Result/Solution:

XL Automation has developed a high end graphical user interface or GUI to view all facility related issues on "one pane of glass", with all the information they require right at their fingertips. Ongoing work for Athenahealth will include integration of all of their fire alarm systems, security, and lighting. The system Implemented on Athenahealths' network is secure, and sits on a dedicated V-lan that can be accessed from anywhere on their network. Because they can have no down time, we implemented a duel server with a RAID 1 configuration. Both servers are running Open and non-proprietary Tridium Niagara Supervisors. Both servers are running multiple



hard drives which mirror each other. If a hard drive or one of the servers happens to fail, they can be back up and running within minutes.



"XL Automation/Mechanical is a n invaluable resource for information and innovative ideas for improving systems and operations…if you are considering working with XL Mechanical/Automation I can assure you it is the right decision and you will be satisfied with the results."

--Mark Blair, Athena Health Director Facilities Infrastructure