

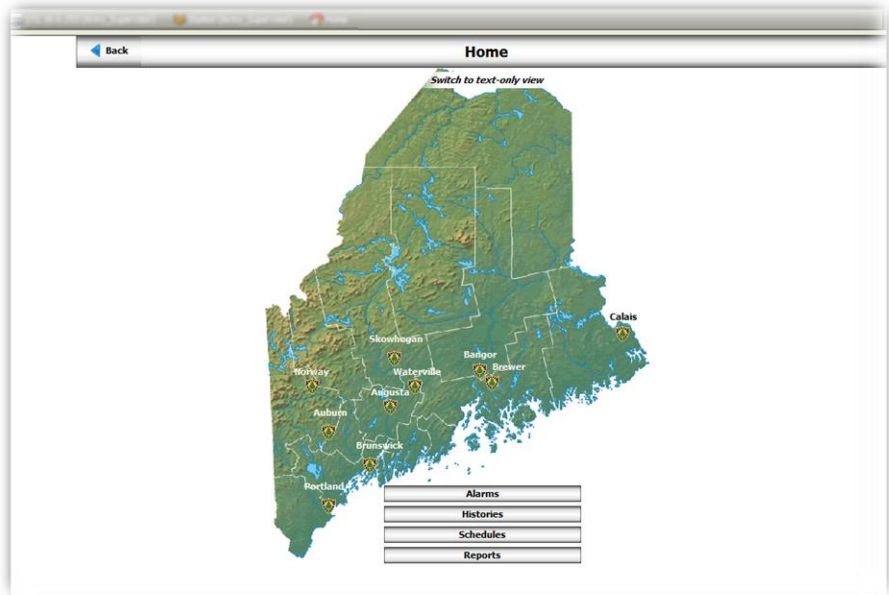
# White Papers



# Maine National Guard

## Introduction:

From 1642 to today, men and women make up the National Guard from 18 units spread across approximately 29 armories and present in 26 local communities throughout the state of Maine. The Maine Army National guard is headquartered in Camp Keyes, Augusta, ME. In addition, “the 11<sup>th</sup> Weapons of Mass Destruction Civil Support Team or WMD-CST, located in Waterville, was the first of the now 57 teams that are spread across the United States of America that is tasked with immediate (less than four hours) response to any unknown chemical, biological, or radiological incident.”



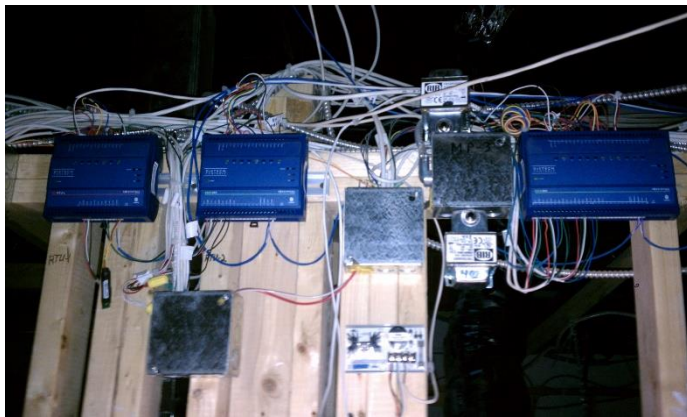
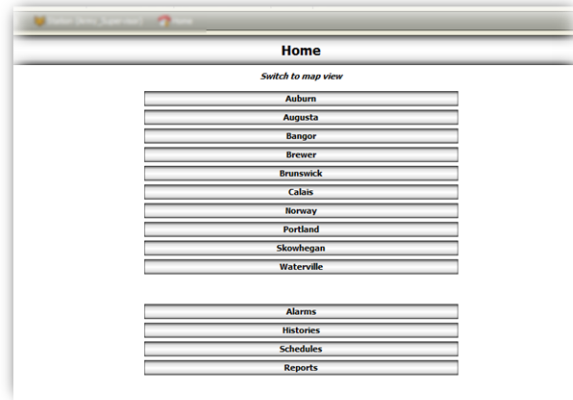
## Background/Problems:

Deviation amongst their dozens of buildings and campuses spread throughout the state was commonplace. Consistency between their

buildings was rare. This is because the bid process for these buildings were

Name	Exts	Address	Host Model	Version	Status	Health	Client Conn	Server Conn	Virtuals Enabled
Army_Bldg3			NPM6	3.7.106.4	(unackedAlarm)	Ok [3/29/17 13:07 EDT]	Connected [1074417]	Not connected	false
ARMY_Bldg7			NPM6	3.7.106.4	(unackedAlarm)	Ok [3/29/17 13:07 EDT]	Connected [307179]	Not connected	false
Army_1435			NPM3	3.7.106.4	(unackedAlarm)	Ok [3/29/17 13:11 EDT]	Connected [1109082]	Not connected	false
Army_3439			NPM6	3.7.106.4	(unackedAlarm)	Ok [3/29/17 13:07 EDT]	Connected [524738]	Not connected	false
Army_UTES			NPM6	3.7.106.4	(unackedAlarm)	Ok [3/29/17 13:11 EDT]	Connected [1109083]	Not connected	false
Army_APRC			JVLN	3.7.106.4	(unackedAlarm)	Ok [3/29/17 13:07 EDT]	Connected [1105393]	Not connected	false
Army_Bldg255			NPM6	3.7.106.4	(unackedAlarm)	Ok [3/29/17 13:10 EDT]	Connected [1093246]	Not connected	false
Army_260			JVLN	3.7.106.4	(unackedAlarm)	Ok [3/29/17 13:09 EDT]	Connected [1093236]	Connected [1093249]	false
Army_FMS3			NPM6	3.7.106.4	(unackedAlarm)	Ok [3/29/17 13:06 EDT]	Connected [1093211]	Not connected	false
Army_BrewerArmory			NPM6	3.7.106.4	(unackedAlarm)	Ok [3/29/17 13:07 EDT]	Connected [510642]	Not connected	false
Army_NonwayArmory			NPM6	3.7.106.4	(unackedAlarm)	Ok [3/29/17 13:10 EDT]	Not connected	Not connected	false
Army_FMS1			NPM2	3.7.106.4	(unackedAlarm)	Ok [3/29/17 13:10 EDT]	Not connected	Not connected	false
Army_SlowArm			NPM6E	3.7.106.4	(unackedAlarm)	Ok [3/29/17 13:08 EDT]	Connected [937981]	Not connected	true
Army_WMD			NPM6	3.7.106.4	(unackedAlarm)	Ok [3/29/17 13:09 EDT]	Connected [1026376]	Not connected	false
APRC_Brns			JVLN	3.8.38.10	(ok)	Ok [3/29/17 13:08 EDT]	Connected [937979]	Not connected	false
Army_BangorReadiness			JVLN	3.7.106.4	(unackedAlarm)	Ok [3/29/17 13:10 EDT]	Connected [1093246]	Not connected	true
Army_WstVArmory			NPM6E	3.7.106.4	(unackedAlarm)	Ok [3/29/17 13:09 EDT]	Not connected	Not connected	false
Army_CalssArmory			JVLN	3.7.108.3	(unackedAlarm)	Ok [3/29/17 13:09 EDT]	Connected [937982]	Not connected	false

unsystematic, they had no unified specification that would help them get a standardized system anytime a project went out to bid. And because they cannot flat spec or list particular contractors directly by name, the Maine National Guard were never aware of what kind of system they were getting until they saw a submittal.



This meant that their systems were different for each building, many times being at the mercy of whoever was low bidder. Because each building was different, facility and maintenance personnel had to learn how to control and

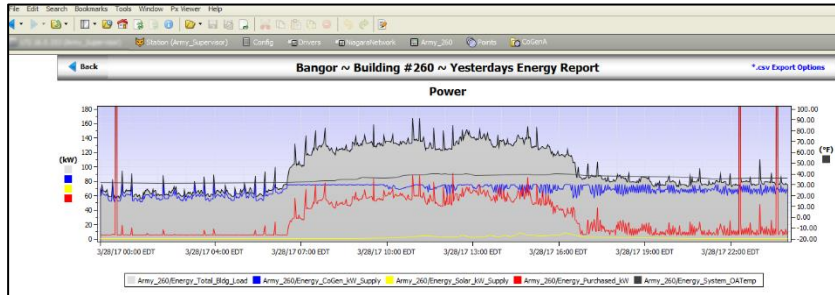
maintain multiple types of systems and had to deal with varying levels of quality and provided features. Having many different systems meant having many different alarms and different schedules, a different Software and hardware maintenance that was required for each system.



Additionally, in the event of a necessary repair over \$5,000 they are required to put it out to bid to at least 3 contractors. This created a challenge because most of the time there was only one local vendor that could service any given system.

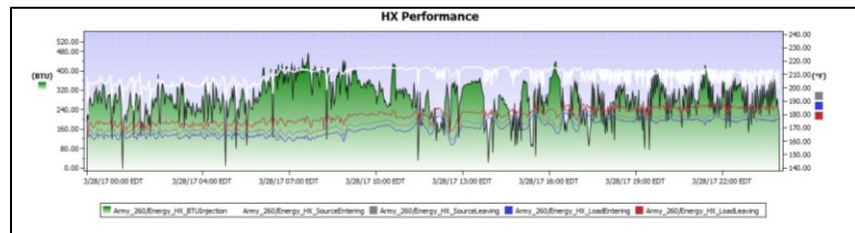
## Conclusion/End Result/Solution:

XL Automation worked with the Maine Army National Guard to help them develop an “Open and Non-Proprietary” platform specification. The

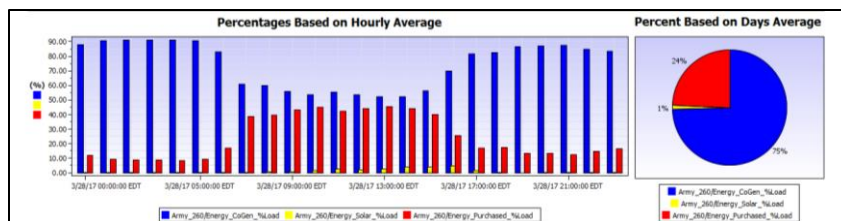


platform of choice was the Tridium Niagara AX platform. Because every major manufacturer has a product line built on the Tridium Niagara

platform, they could have confidence that they would have multiple control bidders propose systems that would be able to work natively on the same platform. Because their specification spells out specifically how the controllers and other system components are to be licensed, they can be guaranteed they will never be locked into one vendor that for service, maintenance, and future upgrades.



Furthermore, this helped consolidate and create consistency between each building and how they are able to care for and maintain those buildings. A Open,



Non-Proprietary, and clear specification and their willingness to hold all control contractors accountable to the spec,

has created an environment that puts them in control of the end product that they receive.

To date, more than 25 buildings have been integrated into the Maine Army National Guard’s Niagara Supervisor by various contractors. This

Supervisor sits directly on the Army's mainframe in Camp Keyes, meaning that it passed all of the rigorous and stringent security requirements necessary to

reside directly on their network.

The Maine Army National Guard now has a system that is expandable, future proof, dependable, cohesive, uniform, **and** competitively bid each time.

"...I would definitely recommend XL Mechanical Energy Management to anyone. They're staff is knowledgeable, conscientious, hardworking, trustworthy and honest."

--Mark E. Roberts, PE  
SRM Engineering  
Supervisor and  
Directorate of Facilities  
Engineering.

