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EXECUTIVE BRIEFING
VIDEO INTEGRATION

Powered by
niagara^{AX}
FRAMEWORK[®]



Saturday, 2:05 a.m.

HVAC system reports a low temperature alarm

2:05 a.m.

Security system re-directs camera to view down hallway in direction of alarm while sending email to authorized personnel – camera begins recording

2:07 a.m.

Personnel reviews video, turns hallway lights on, sees water leaking from ceiling, shuts down HVAC system, and calls for emergency repair – *all remotely*

2:08 a.m.

Disaster is averted and enterprise risk mitigated

What if your building automation, energy, security, and video systems were integrated within a facility framework that let you identify, manage, and resolve critical events in real time – possibly saving your facility from a catastrophe?

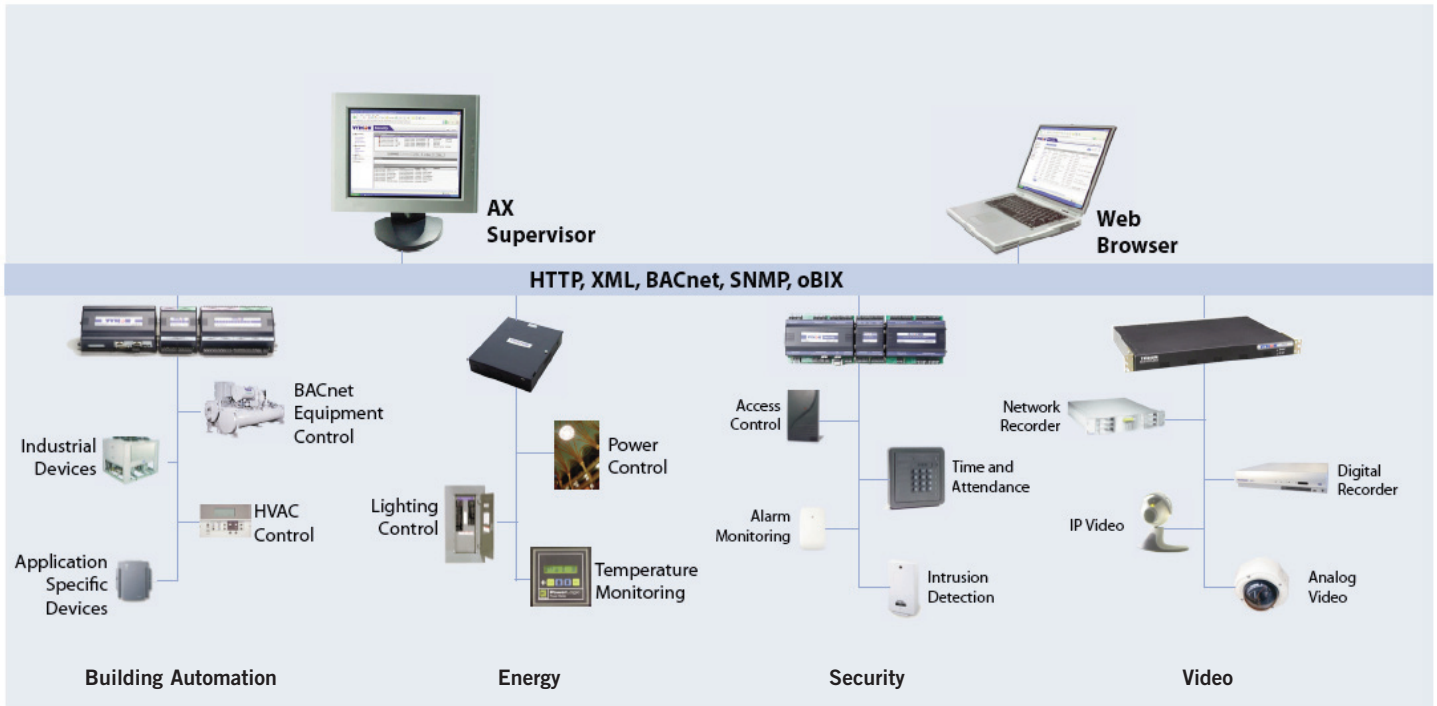
Is this level of integration available today?

Many advances have been made in the development and deployment of video-based security systems. Yet many of these video devices remain isolated from other critical building systems and are therefore limited in their usefulness and coverage. Standalone video monitoring/alarming systems, while important, are just the first steps towards achieving a complete security solution. To optimize the true value of your video systems, you need to **integrate** these video devices with existing energy, HVAC, building automation, and security management systems to create a new level of visibility into – and resolution of – facility events as they occur.

Executives today face three key challenges as they look to maximize the performance of their facilities and the safety of the work environment:

1. How do you turn today's traditional isolated security silos into integrated components of a larger building-wide solution and transform conventional facilities into dynamic, flexible Intelligent Buildings?
2. How can you optimize, extend, and protect your current investment in video equipment?
3. And how can you do it quickly and cost-effectively?

Fortunately, a new generation of integrated security solutions, based upon the Niagara^{AX} Framework[®] from Tridium, is now available to help executives meet this challenge.



With the addition of Niagara Video to the Niagara^{AX} portfolio, executives can now manage systems in real time, from a single user interface, across four functional areas: building automation, energy, security, and video.

INTRODUCING NIAGARA VIDEO

Tridium's Niagara Framework® is the leading software platform for meeting the complex challenges of building integration, interoperability, and connectivity.

Tridium's latest addition to the Niagara^{AX} portfolio, Niagara Video, is the next step in providing a comprehensive system that integrates all common building functions – environmental control, intrusion detection, access control, lighting, and energy management – with video.

Niagara Video is an open video framework solution that provides seamless integration between Niagara^{AX} applications and today's digital video recorders, IP cameras, network video recorders, and video management solutions.

Niagara Video integrates today's diverse video devices into a unified system that can be combined with other building applications to create a *unified, intelligent facility-wide management system*:

- Creates complete interoperability between video, intrusion detection, access control, lighting, HVAC, energy management, and building automation systems
- Provides visibility into the entire facility and all systems via a *single browser-based user interface* – a truly integrated management solution
- Helps users identify incidents, notify personnel, and manage the response from anywhere in the world
- Can also be used as a standalone video system providing windows into key processes

BI-DIRECTIONAL ALARMING

Niagara Video's bi-directional alarm feature is at the heart of its next-generation capabilities. Niagara Video provides comprehensive two-way alarming features:

- (1) Alarms triggered and sent from video devices to other facility systems
- (2) Alarms triggered and sent from other facility systems to video devices

This bi-direction exchange generates automatic live video feeds of critical events – with integrated video alarm management – regardless of where the event originated or which system triggered it. The bottom line? Immediate event verification, fast response, and rapid resolution.

- Alarms from an event that occurs in another system – such as a building automation or lighting application – can initiate events in the video system. For example, a flame event in a boiler room can trigger a video camera to react immediately, automatically re-direct, and begin recording the event in a protected video alarm database for future reference.
- Conversely, an alarm from a video device can be configured to trigger actions in other systems and initiate control logic sequences – such as lighting control or building lockdown – elsewhere in the facility. For example, when a camera “sees” unauthorized motion activity, it can trigger the facility to turn the lights on while also locking doors.

THE BENEFITS OF A FRAMEWORK APPROACH

Software Frameworks

A framework is a conceptual structure used to solve complex issues. A **software framework** is a re-usable design for a software system and subsystems. It includes support programs, code libraries, a scripting language, or other software to help develop and glue together the different components of a software project.

Integrating geographically-dispersed, multi-vendor video equipment is a time-consuming, expensive effort. Tridium's framework approach offers a number of speed and cost efficiency benefits that deliver significant value to users (especially when compared to outdated non-framework approaches like gateways).

More and more organizations are leveraging Tridium's framework approach when seeking to integrate multiple building and security systems. Why? Because with the Niagara^{AX} software framework, *the foundation of the video application is already in place and so a real-world solution can be deployed rapidly and with high cost efficiency.*

Framework benefits for users:

A single, customizable browser-based user interface for greater management and control of facility-wide systems and equipment:

- Easy configuration and rapid implementation
- Eliminates need for multiple operators
- Lower TCO and risk
- Pre-built Niagara widgets for video support make configuration easy
- Flexible and scalable – can adapt to any need or requirement
- Freedom of choice – integrates different equipment so you aren't locked down to any one vendor or manufacturer
- Consistent gateway and user interface for multiple subsystems
- Maximum functionality
- Conforms to IT standards
- Consistent APIs
- Better service delivery
- Seamless migration path and high investment protection

Frameworks provide faster time-to-market, lower risk, lower development costs, and lower operational costs.

About Tridium, Inc.

Tridium is the global leader in software frameworks, open modular platforms, automation infrastructure technology, and device-to-enterprise integration solutions. Our technologies extend connectivity, integration, and interoperability to the millions of devices deployed in the market today. We empower manufacturers to develop intelligent equipment systems and smart devices that enable collaboration and communication between the enterprise and edge assets.

The Niagara Framework® is a software platform that integrates diverse systems and devices – regardless of manufacturer or communication protocol – into a unified platform that can be easily managed and controlled in real time over the Internet using a standard web browser.

Today, there are more than 130,000 instances of Niagara operating in 43 countries worldwide in applications that include: energy and sustainability management, intelligent building automation, M2M, telecommunications, industrial, security automation, lighting control, home automation, convergence retailing, and smart facilities management.

The Sedona Framework™ is the industry's first open source development framework that provides a complete software platform for developing, deploying, integrating, and managing pervasive device applications at the lowest level. It brings the power of programmable control and the Internet down to extremely inexpensive devices. The Sedona Framework distributes decision-making control and manageability to any device, bringing intelligence and connectivity to the network edge and back.

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