VEGA SYSTEMS INC.

USE CASE DOCUMENT

Safe & Connected Campuses

Protecting Students and Staff Across Distributed Environments

Executive Summary

Universities represent one of the most challenging environments for video security infrastructure. Unlike corporate campuses or single-building facilities, university campuses consist of dozens of buildings, mobile assets, remote locations, and diverse stakeholder needs. From the perimeter fence to the research lab, every camera must remain live, recorded, and compliant with federal regulations.

Vega Systems provides a comprehensive suite of solutions specifically designed to address the unique challenges facing campus security operations. Our products ensure continuous situational awareness, rapid incident response, regulatory compliance, and efficient system maintenance across the entire campus ecosystem.

The Challenge: An Open Environment with High Stakes

Universities are not monolithic facilities. They are distributed networks of high-security zones, each with unique connectivity, retention, and operational requirements. A generic failover solution cannot address the needs of a remote shuttle bus, a temporary event check-in kiosk, a 24/7 research facility, or a residence hall during move-in week.

Key challenges include:

- Mobile asset connectivity for campus shuttles and patrol vehicles
- Command center resilience during critical incidents and system maintenance
- Cybersecurity threats, including ransomware and lateral attack propagation
- Clery Act compliance and liability protection requiring continuous recording
- Compressed upgrade windows during academic breaks

Vega Solutions for Campus Security

Vega Systems offers five integrated products that work together to create a resilient, secure, and maintainable video infrastructure for campus environments.

Product	Primary Function	Campus Application
Atlas	Mobile connectivity optimization	Shuttles, patrol vehicles, mobile units
SureStream	Direct camera-to-client streaming	Command center resilience
RMF	Cybersecure redundancy framework	Multi-datacenter resilience
Nidhi	Compliance vault and timeline healing	Clery Act compliance, liability protection
XPort	Migration and portability tool	Summer upgrade acceleration

## Use Case 1: Campus Shuttles & Patrol Fleet

The Problem: *"The video feed from the shuttle bus cuts out every time it drives behind the Engineering building."*

Solution: Atlas

Mobile assets require stable, uninterrupted video connectivity regardless of their location on campus. **Atlas** runs on top of the vehicle's existing cellular WAN router, actively optimizing cellular streams as vehicles move between towers and through areas with variable signal strength. Dispatch operators see a clear, uninterrupted live view at all times, eliminating the frustration of dropped feeds during critical moments.

Key Benefits:

- Seamless handoff between cellular towers
- Optimized stream quality based on available bandwidth
- Works with existing multi-WAN router infrastructure
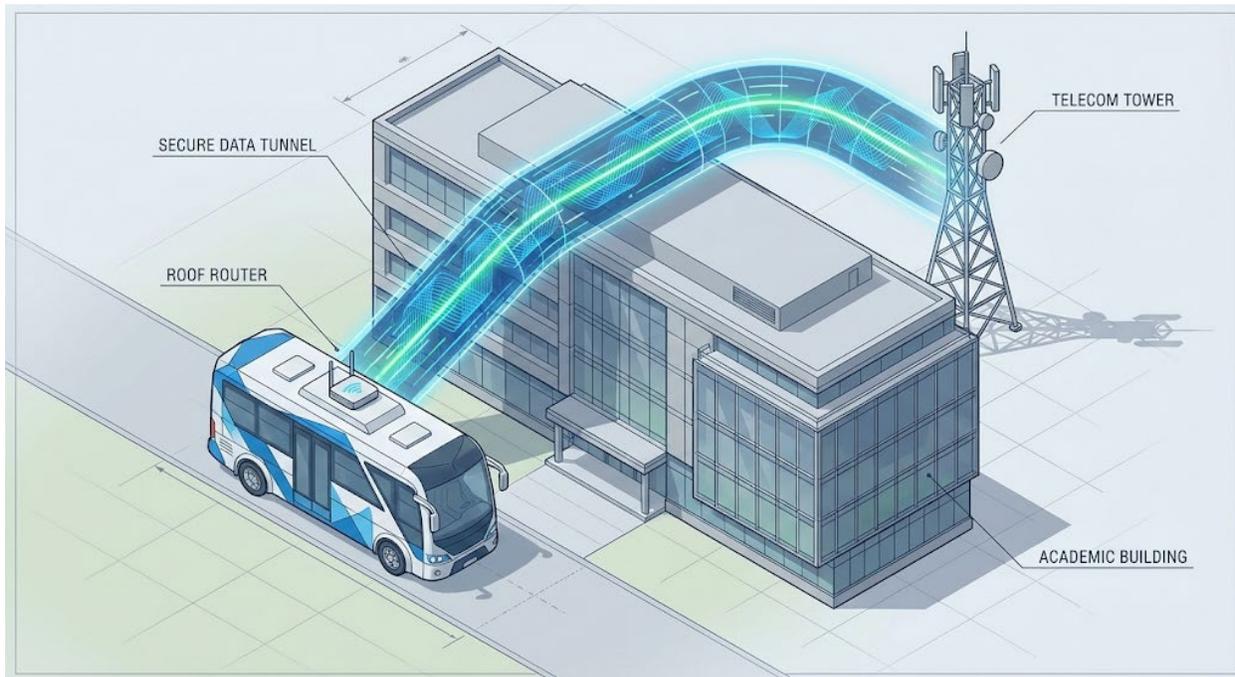
## Use Case 2: Command Center & Dispatch

The Problem: *"During an active shooter drill, the VMS server was patched, and we lost eyes on the hallway for 60 seconds."*

Solution: SureStream

In emergency situations, every second of situational awareness matters. **SureStream** creates a direct, autonomous video path from critical cameras to dispatch screens, completely bypassing recording servers. Even during IT maintenance windows, server patches, or unexpected outages, Police Dispatch maintains continuous live views of critical areas.

Key Benefits:

- Zero-downtime live video during server maintenance
- Autonomous operation independent of VMS infrastructure
- Critical for emergency response scenarios
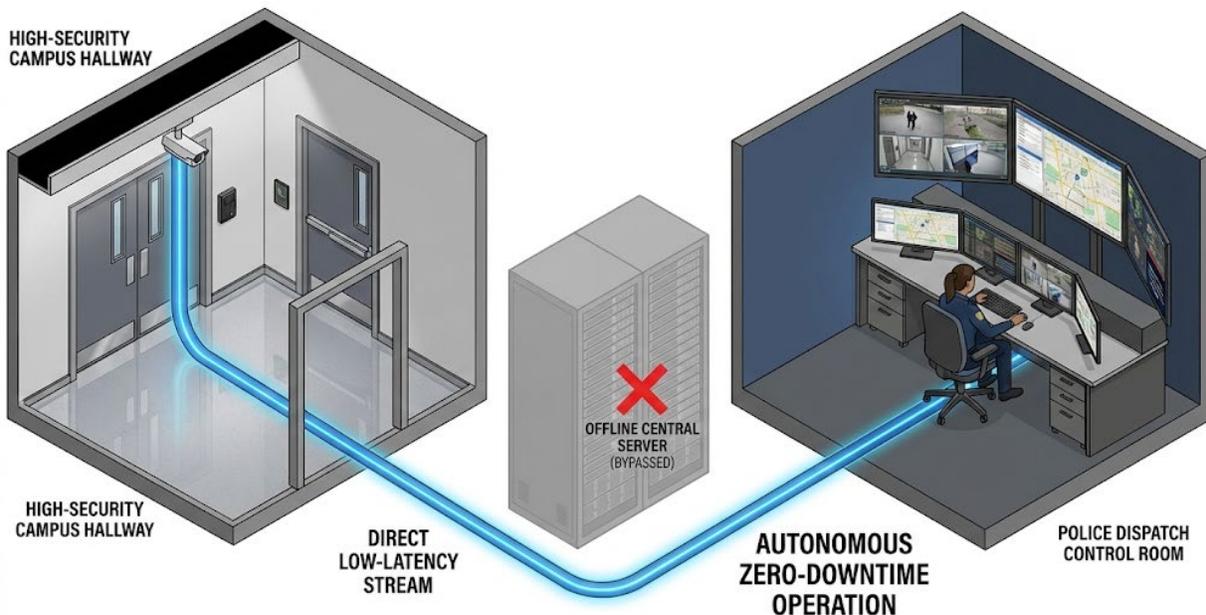
Use Case 3: Cyber-Aware Redundancy

The Problem: "Ransomware hit the Science Lab. Because we relied on traditional SQL clustering, the corrupted state replicated instantly."

Solution: Redundancy Management Framework (RMF)

Traditional SQL clustering acts as an **attack multiplier**, blindly mirroring every byte including malware and corrupted data. **RMF** eliminates this vulnerability by isolating buildings into independent trust domains. API based synchronization prevents malware propagation.

Key Features:

- Selective object-level synchronization prevents malware propagation
- Fully isolated data centers eliminate shared attack surfaces
- Active-active architecture ensures 24/7 availability
- Client-side intelligence enables near-instantaneous failover
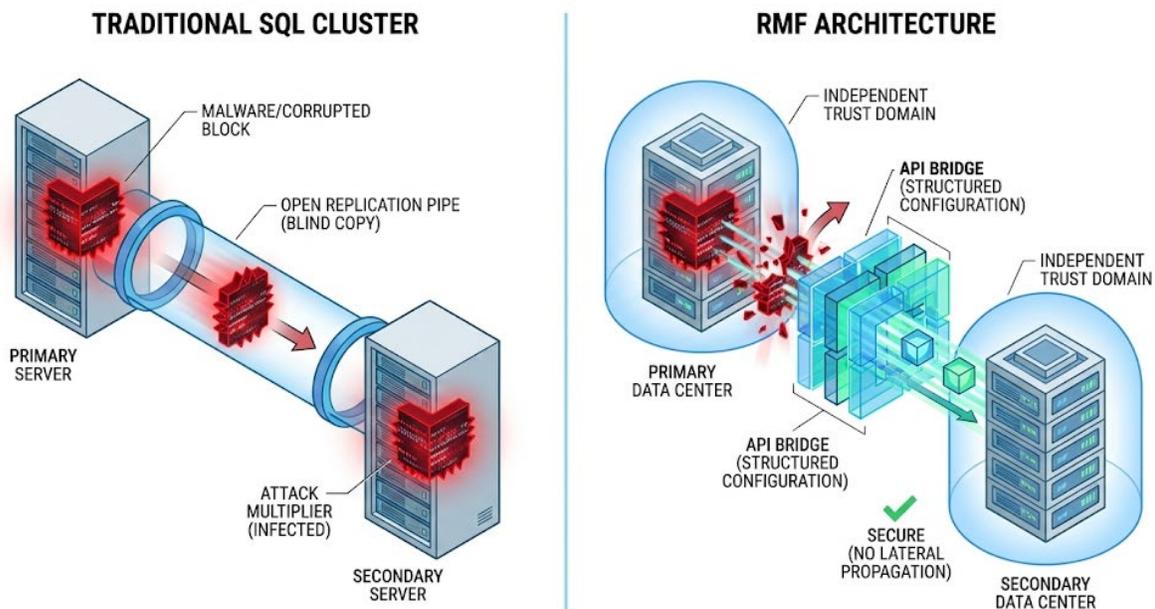
Use Case 4: Clery Act & Liability Protection

The Problem: *"A hard drive crashed, and we lost footage of an assault. We are facing a Clery Act violation fine."*

Solution: Nidhi

Universities are legally mandated to report and retain crime data under the Clery Act. **Nidhi** serves as your compliance vault, automatically mirroring footage from high-risk areas such as residence halls, cash-handling areas, and parking structures to a secure secondary location. If a local recorder fails, Nidhi heals the timeline, protecting the university from regulatory violations and legal liability.

Key Benefits:

- Automatic backup of footage from designated high-risk areas
- Timeline healing recovers missing footage after hardware failures
- Comprehensive audit trail for compliance documentation
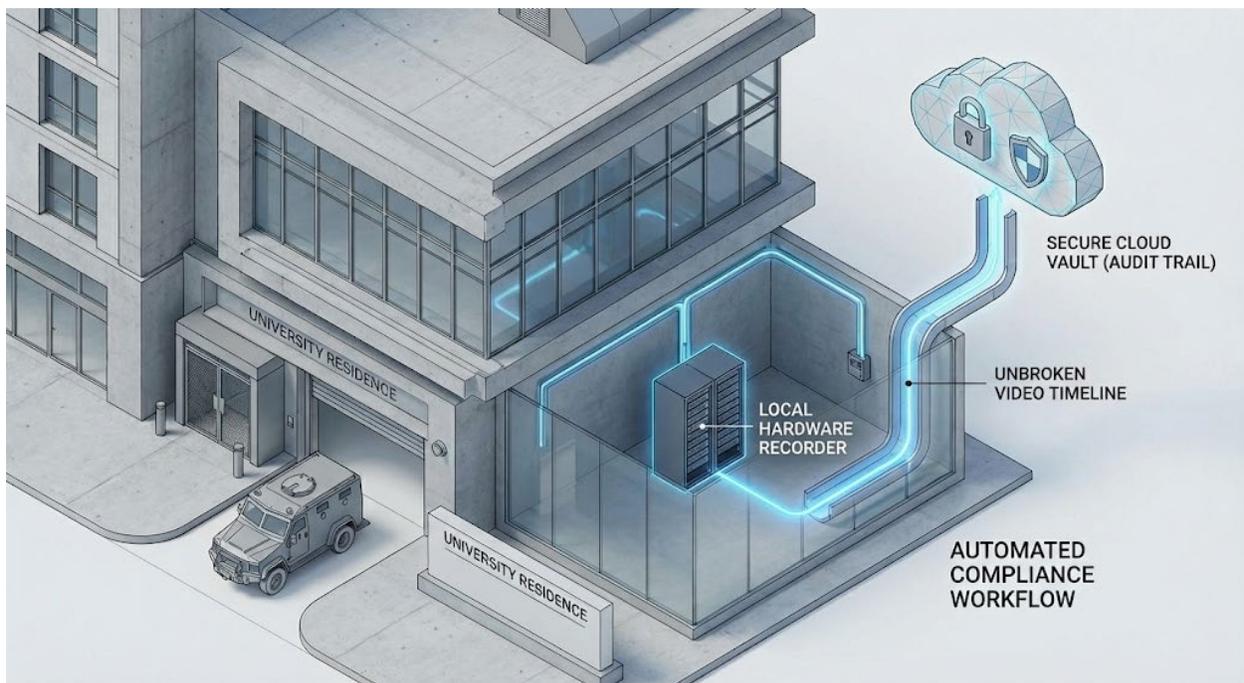
Use Case 5: The Summer Crunch Upgrade

The Problem: *"We have 8 weeks of summer break to upgrade 2,000 cameras. We're running out of time."*

Solution: XPort

Academic calendars create narrow windows for infrastructure upgrades. **XPort** is the migration accelerator that allows your Systems Integrator to bulk-migrate thousands of cameras from old servers to new infrastructure in hours rather than weeks. It automatically handles all IP mapping, configuration transfer, and validation, ensuring your system is fully operational before students return in the fall.

Key Features:

- Reduces migration costs by up to 60%
- Seamless Milestone XProtect integration
- Customizable migration: select specific devices, roles, or migrate everything
- Supports consolidation of siloed deployments
- On premises to cloud migration support
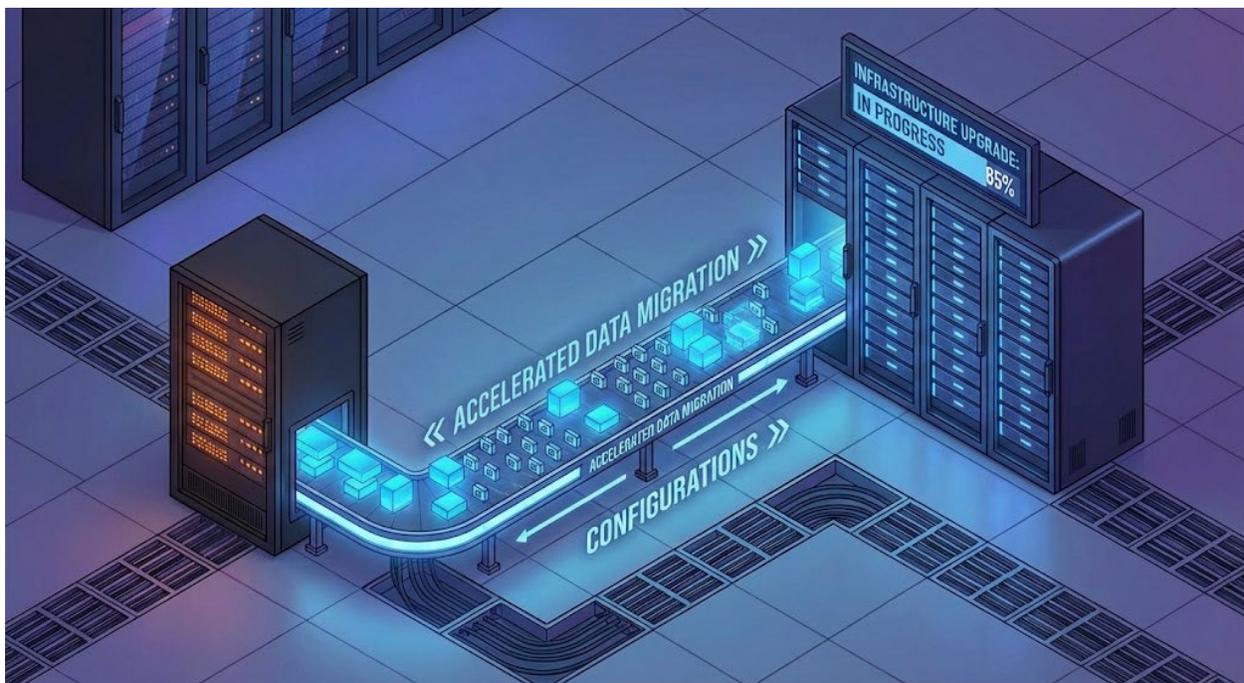
Technical Requirements

Platform Compatibility: Vega solutions are designed for seamless integration with Milestone XProtect Video Management Software (VMS). Products support all XProtect variants, including Essential+, Express+, Professional+, Expert, and Corporate.

Architecture Support: RMF supports Clustered, Federated, and Independent XProtect architectures, providing flexibility to align with your existing infrastructure design.

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Contact Us

Ready to transform your campus security infrastructure? Our team of experts is here to help you design and implement the right solution for your unique requirements.

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What to Expect

1. **Initial Consultation:** Discuss your campus security challenges and objectives
2. **Solution Design:** Receive a customized architecture recommendation
3. **Proof of Concept:** Validate the solution in your environment
4. **Deployment Support:** Work with your Systems Integrator for seamless implementation

Request a Demo

Visit **vega25.com** to schedule a personalized demonstration of our solutions.

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