

# Extreme Fabric + Axis Communications

## Automated Device Onboarding and Deployment: K-12

As online learning, smart classrooms, and connected technologies continue to expand, schools need a secure, high-performance foundation that delivers consistent uptime and performance across every classroom, campus, and district office – no matter how many users or devices connect. And with Ethernet-based networks, surveillance extends beyond traditional control rooms, enabling access to live and recorded footage from virtually any location. While this presents significant opportunities for safer, smarter spaces, it also introduces certain challenges.

Modern video surveillance and POE requirements demand more than most networks are equipped to handle. State-of-the-art, high-definition surveillance cameras generate massive data, but outdated and underpowered multicast networks choke performance and waste the true potential of surveillance investments. The challenge: transform siloed, legacy setups into integrated, scalable architecture that empower teams to deliver resilient surveillance solutions – fast.

Zero-touch provisioning through Extreme Fabric Connect and Extreme Platform ONE™ eliminates manual configuration, enabling applications and AV services to perform up to 3x faster across edge and core.



Help your school detect, deter and respond to threats and incidents.

Axis enables a smarter and safer world by creating solutions for improving security and K-12 performance. As a network technology company and industry leader, Axis offers solutions in video surveillance, access control, intercoms, and network audio. They are enhanced by intelligent analytics applications and supported by high-quality training.

### Simplify and Scale Intelligent Surveillance Deployment

Quickly deploy and maintain device deployments of Axis network products at-scale by leveraging automation built into Extreme Fabric.



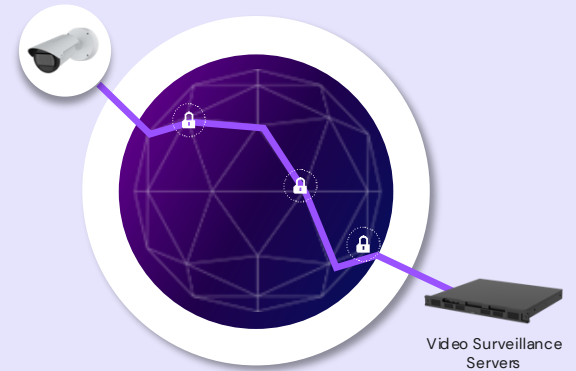
Faster deployment and services by eliminating the need for manual configuration, allowing applications to run as much as three times faster



Fabric-native automation supports the rapid expansion or contraction of thousands of live video streams – no maintenance windows, no manual VLAN updates, and no network reconfiguration required.



Self-healing, SPB-based architecture reduces protocol complexity and human touchpoints, while unified orchestration ensures consistent uptime and policy control across every switch and edge device.

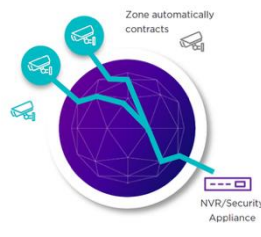


### Enhanced Security With Elasticity

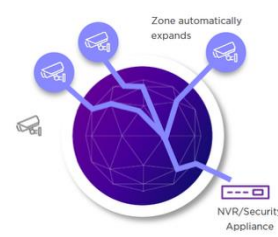
Extreme Fabric allows security camera zones to elastically and automatically adjust as cameras are removed, added, or moved. With zero-touch provisioning of Axis cameras onto Extreme's Fabric network, cameras are always assigned to a secure multicast-enabled segment regardless of where they connect to the fabric network.



Security Camera Zone



Security Camera Removed



Security Camera moved

# Features

The partnership between Extreme and Axis delivers highly-scalable video surveillance that is easy to design, deploy and operate. The tight integration of the Axis products with Extreme Fabric allows for easy scaling of network video streams and a reliable, always available video surveillance solution.



### Tight Integration

Axis' latest products support Extreme Fabric due to built-in software integration between Extreme & Axis



### Protocol Simplification

Reduce the stack of protocols from a complex combination to a single IEEE/IETF Shortest Path Bridging protocol



### Flexible Enablement & Multiple Security Tiers

Zero touch onboarding of Axis devices onto IP network with open & standardized framework for seamless integration into daily workflows

## Extreme Fabric + Axis Network Products: From the Fence Line to the Classroom

Protecting your K-12 environment and ensuring school safety has never been more important.

Axis offers a wide range of open-platform IP-based products for video surveillance, analytics, access control, sensors, intercoms and network audio solutions with Extreme Fabric Attach supported out-of-the-box on more than 150 products running AXIS OS 12.1 or later.

The integration between Axis and Extreme enables automatic onboarding of Axis devices into your Extreme Network infrastructure with no pre-configuration needed on the Axis device. Extreme Networks switches can move Axis devices directly into the desired, pre-configured network segments, saving you significant time and work on network switch port configuration.

The [supported Axis products](#) include network cameras, speakers, intercoms, sensors, and access control solutions.



## Extreme Platform ONE for AI-Powered Networking & Visualization of Ecosystem



Learn more about Extreme Fabric [here](#)  
Learn more about Axis Products [here](#)

Standards-based Extreme Fabric redefines network agility. It creates multiple secure virtual networks that run effortlessly across any infrastructure—no matter the topology. With automated provisioning and inherent security, it eliminates manual configuration, reduces errors, and keeps networks running seamlessly.

Extreme Fabric when combined with Extreme Platform ONE™ offers enhanced benefits such as:

- Zero-Touch Automation – Simplify provisioning and eliminate manual configuration
- Sub-Second Resiliency – Maintain always-on connectivity with instant failover
- Scalable & Predictable Performance – Support tens of thousands of devices without complexity
- Built-In Security – Micro-segmentation and policy enforcement without extra controllers
- Simplified Operations – One converged control plane for wired, wireless, and data center
- Lower TCO – Fewer protocols, faster deployment, and no premium licensing
- Global Technical Assistance – Industry-leading, 24/7 technical assistance included with all Platform ONE subscriptions

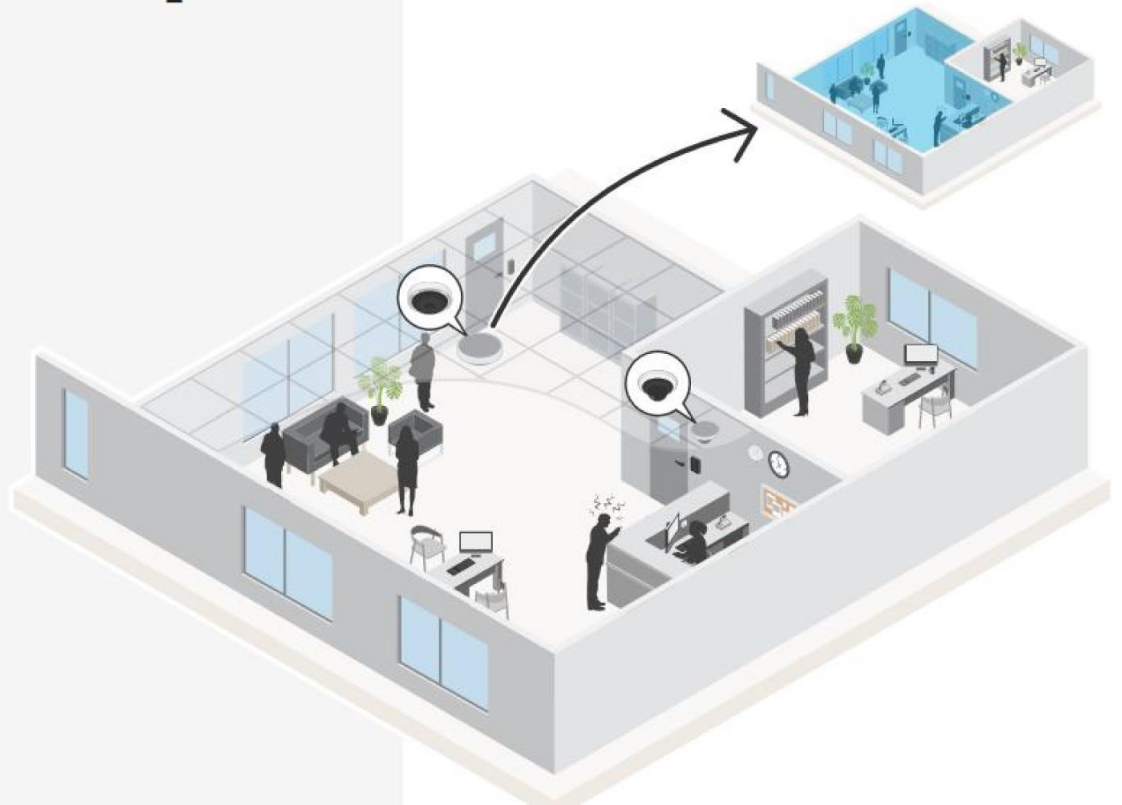
# Main office or reception

### Challenges

- > Maintain awareness of visitors
- > Verify that students are picked up by authorized adults
- > Ensure safe workplaces
- > Protect property from vandalism, theft, and burglary
- > Keep confidential information secure
- > Respond quickly to safety incidents

### Solution overview

Network access control limits access to the main office to authorized individuals and enables you to instantly and remotely lock and unlock doors. Cameras or speakers with audio detection analytics improve response times by triggering alerts in the event of aggression, gunshots, or breaking glass. Network speakers and strobe siren alerts can be configured and zoned to get information – both emergency and non-emergency – right where it's needed.



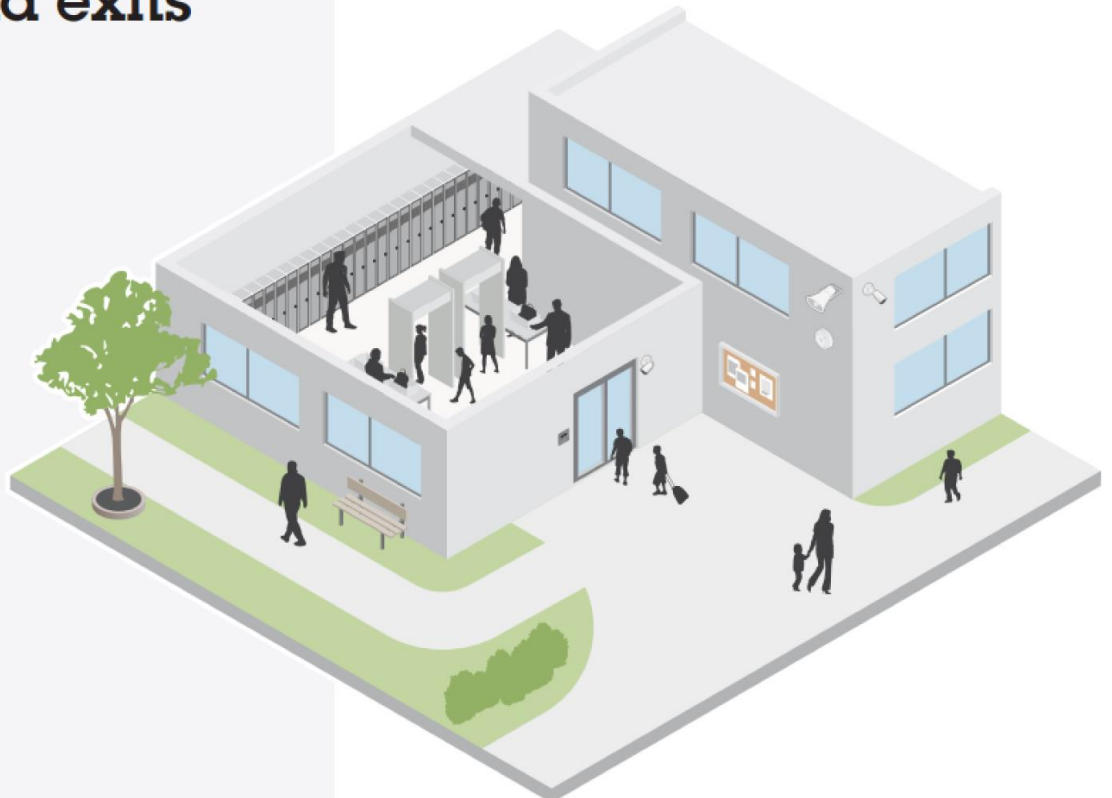
# Entrances and exits

### Challenges

- > Protect property from vandalism, theft, and burglary
- > Stay alert to trespassing and loitering
- > Respond quickly to truancy
- > Ensure safe workplaces
- > Prevent unauthorized or unwelcome visitors

### Solution overview

AXIS Object Analytics helps detect trespassers and intruders, and event-triggered strobe sirens and voice messages act to deter them. Cameras or speakers paired with audio detection analytics improve response times by triggering alerts in the event of aggression, gunshots, or breaking glass. An IP-based public address system with audio zoning meets all your needs for safety, operational, and informational voice messages. Access control and connected systems automate building access for credentialed individuals and enable remote visitor approval.



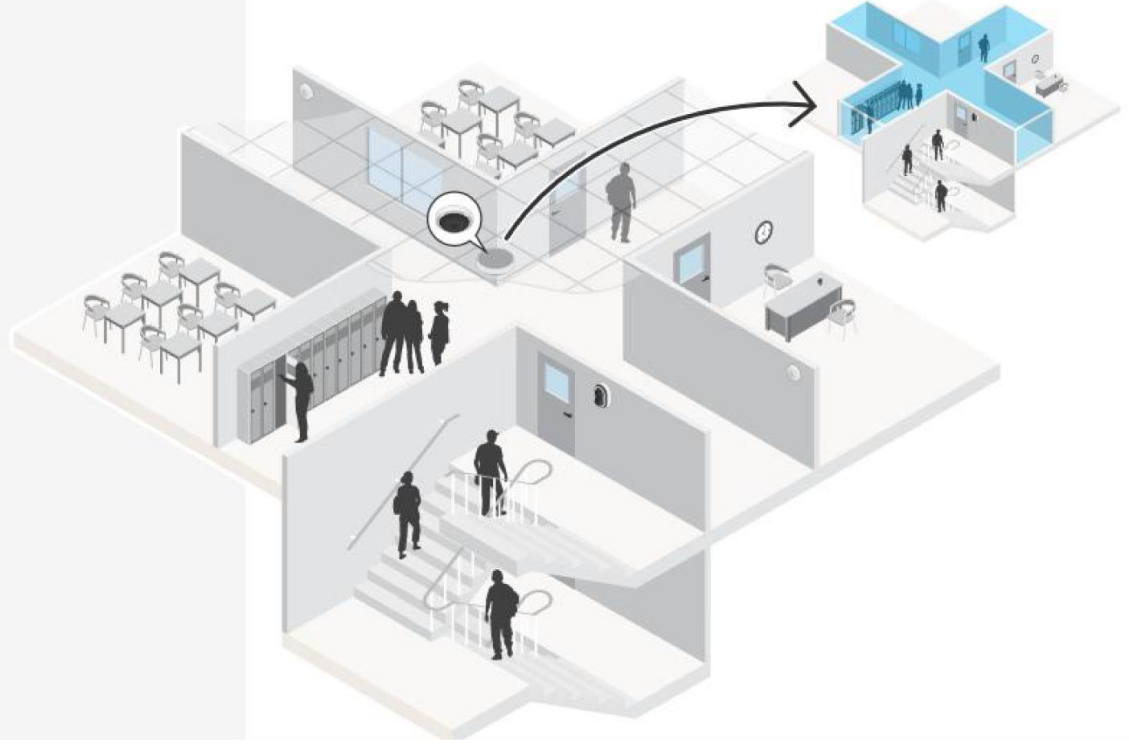
# Hallways and stairwells

## Challenges

- > Deter unwanted behaviors
- > Prevent vandalism and protect property
- > Respond promptly to accidents
- > Investigate bullying, fights, and harassment
- > Track unauthorized individuals' movement
- > Minimize loitering and unwanted behaviors

## Solution overview

Multidirectional and dual-sensor cameras provide forensic-quality coverage in corridors and stairwells, respectively. Paired with sound detection analytics, they can alert you to potential incidents outside the camera's field of view. Network audio lets you respond to incidents even before staff arrives on scene, using live or prerecorded and event-triggered messages from the nearest speaker.



# Classrooms and laboratories

## Challenges

- > Deter aggression
- > Maintain a safe working environment
- > Respond promptly to accidents and incidents
- > Limit access to authorized individuals
- > Prevent vandalism, theft, and burglary
- > Support remote learning

## Solution overview

Speakers or cameras with audio capabilities and sound detection analytics can notify security personnel to the sounds of glass breaking, gunshots, or aggression. Strobe sirens alert affected areas to an urgent situation. A variety of network devices with two-way audio capability facilitate both clear instructions from administrators and real-time updates from staff members at the scene. Access control limits unwanted traffic and enables classroom lockdowns with the push of a button. Live streaming cameras support distance learning and flipped classroom models.



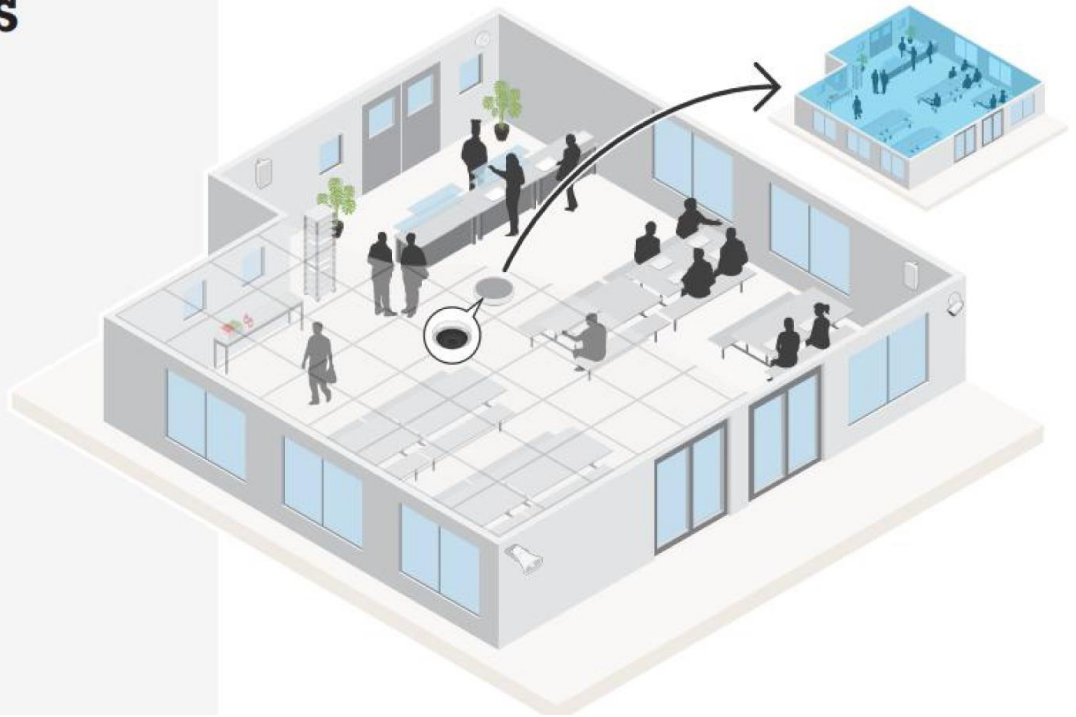
# Common areas and cafeterias

### Challenges

- > Provide a safe and secure environment
- > Protect property from theft, burglary, and vandalism
- > React quickly to accidents
- > Manage after-hours visitors
- > Prevent trespassing and loitering

### Solution overview

A single panoramic camera provides a 180° to 360° field of view of your common areas. Video and audio analytics help keep security staff or local law enforcement alert to potential incidents and unauthorized presence, day or night. Access control enables and maintains a record of authorized visitors to a room or a partitioned area within that room. Network speakers broadcast live, scheduled, or event-triggered messages, as well as background music.



# Recreational areas and parking lots

### Challenges

- > Protect property from theft, burglary, vandalism, and arson
- > Prevent illicit, illegal, and unwanted behaviors
- > Efficiently manage vehicular traffic
- > Ensure only authorized access
- > Provide a safe and positive environment for students, staff, and visitors

### Solution overview

Thermal technology, radar, visual cameras, and intelligent analytics work together to detect, classify, verify, and track intruders, day and night. Sound detection analytics provide alerts of incidents outside the camera's field of view. Vehicle access control and license plate recognition analytics ensure vehicles gain access only to the appropriate parking lots, while network video intercoms let you remotely manage and maintain a record of visitor parking requests. Network audio supports public address, serves as your sound system for events, and supports deterrent messages. Live streaming cameras enable high-quality event broadcasting.

