

Highlights

IP VIDEO SURVEILLANCE

While IP multicast plays a key role in the transition of video surveillance technology from analog to IP-based, it can be difficult to design, deploy, troubleshoot and scale.

IP multicast over Extreme Networks Fabric Connect resolves these issues by providing high scalability, flexibility and ease of deployment.



Video Surveillance

IP Multicast over Extreme Networks Fabric Connect

A Fast Growing Market

Already a critical component of the safety and security procedures for many organizations, IP video surveillance deployments are expected to grow at a CAGR rate of 23.5% for the period 2014 to 2020 (IMS Research). In addition to providing real-time monitoring of personnel, assets and the physical environment, video surveillance supports law enforcement efforts such as those surrounding the Boston marathon bombings.

Unfortunately, many networks are not equipped to deal with modern IP video surveillance applications. When data generated by state-of-the-art, high-definition surveillance cameras runs over ill-equipped networks that rely on IP multicast protocols developed 15 or more years ago, the full potential of surveillance data cannot always be realized. Resolving this issue, IP multicast over Extreme Networks Fabric Connect provides the scalability, flexibility and ease of deployment required to accommodate today's high-powered video surveillance traffic.

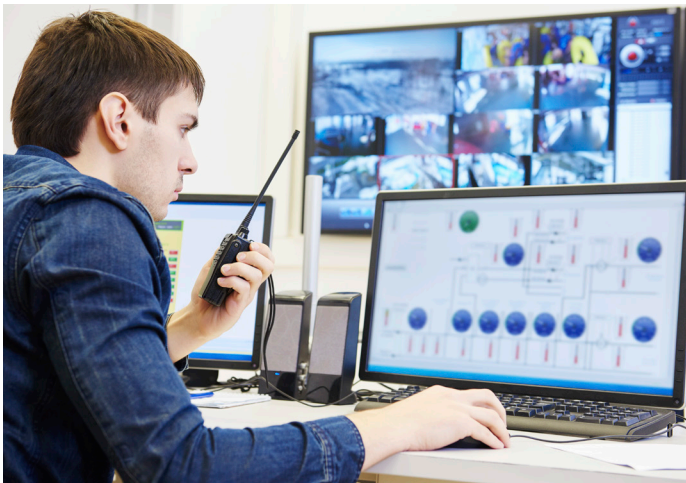
IP Video Surveillance Network Readiness Checklist

Scalability – How many surveillance cameras can your network support?

Most IP multicast video surveillance solutions limit scaling to a few thousand streams which curbs wide deployment of multicast solutions. Because video surveillance is relied upon to record events such as prison breaks and security breaches, the network on which it runs must be able to scale to meet changing traffic demands.

Availability – How quickly can your IP video surveillance solution re-converge?

Any failure in the network can result in sub-optimal recovery times for an IP video surveillance solution. Slow re-convergence can result in minutes or hours of lost video, a situation that could escalate from inconvenient to dangerous. Make no video loss your standard.



Expect Success

Extreme Networks Fabric Connect offers an IEEE/IETF standards-based solution. Avoiding the complexity of traditional overlay multicast routing protocols, it simplifies all IP video surveillance deployments from small to super large.

Simplicity and Predictability – How quickly can you configure your solution and predict performance?

IP multicasting is complex. Relying on protocol overlays that must remain in synch with underlying network topologies, it requires a large operational budget and staff. Choose a solution that eliminates complexity and offers predictable traffic performance.

Security – How can you provide a secure infrastructure for video surveillance traffic?

To ensure that surveillance traffic is isolated from other traffic, many organizations deploy a dedicated surveillance infrastructure. Most traditional LANs, however, do not deliver true end-to-end separation of traffic which makes such an infrastructure vulnerable to security breaches such as VLAN jumping. Deploy a network that offers more secure end-to-end traffic separation without the overlay.

Traditional IP Multicast	IP Multicast over Extreme Networks Fabric Connect
Complex - Multiple protocols (PIM over OSPF) <i>In typical multicast networks today, PIM must be enabled on all routers globally and on all core interfaces and local edge interfaces where multicast is required.</i> - Traffic routed through rendezvous point - Complex to operate and troubleshoot - Proprietary tools	Simple - Easy to design <i>Single protocol (IS-IS)</i> - Traffic takes direct route to destination - Easy to deploy and troubleshoot <i>Standards based</i> - IEEE 802.1 ag extensions <i>Edge provisioning only</i> - Single command configuration - No need to touch the core
Slow Recovery - Recovery takes seconds, even minutes - Key video may be lost and/or gaps in archived materials created	Lightning-fast Recovery - Sub-second recovery times (<200msec) protects applications - Video always available
Limited Scale 100s of streams - Most systems max out at 1-to-2 thousand	Massive Scaling Tens of thousands of streams supported
Security Vulnerable - Limited solutions offer end-to-end traffic separation <i>While MPLS can isolate traffic, its design, deployment, and trouble shooting is highly complex</i>	More Secure Extreme Networks Fabric Connect provides a closed network for multicast traffic (L2 and L3 VSN) that delivers end-to-end separation and helps keep communications private

Learn More

To learn more about the Extreme Networks IP Video Surveillance solution, please contact your local Extreme Networks representative or go to www.extremenetworks.com/video-surveillance.