



# AVAYA

Engage The Power of We™

## Avaya Networking and IP Office form the foundation for a Safe School Infrastructure

### Where Campus Safety meets an Engagement Solution

In concert with Avaya DevConnect members ALGO Communication Solutions, Conveyant Systems and several video surveillance solution providers Avaya has developed a comprehensive solution for Safe Schools. Administrators responsible for physical security and IT can now deploy, from their office or mobile smart phones, a unified solution with inherent building and campus safety, when designing 21st Century learning environments.

Avaya has created and validated reference architectures for school campus wireless, LAN and video surveillance networks. These proven designs are enabling 1:1 learning environments with a scalable multicast physical security design. School IT administrators can now effectively support an IP based Safe School solution allowing small deployments under 300 cameras to evolve into large deployments without network infrastructure becoming a bottleneck. When an emergency occurs, an Intelligent Engagement Solution infrastructure comprising Avaya Team Engagement, Fabric Networking, IP Office and Aura interconnects an array of notification and security capabilities, from E911 emergency call notifications, to alarms and strobe lights, instant video surveillance images, to door locks

and loudspeakers – some triggered automatically – that can save critical time and better protect the wellbeing of students, faculty, staff and visitors. Avaya and its Safe School solution partners can help schools with unified, critical information in a time of crisis.

### Avaya Safe School Solution

Avaya Ethernet Routing Switch and Fabric Connect (an enhanced implementation of IEEE 802.1aq Shortest Path Bridging and IETF RFC 6329) Virtual Services Platform switching products are developed to simplify auto provisioning services to cameras, UC phones for IP Office deployed in either appliance based, virtualized or cloud models. Avaya WLAN 9100 APs deliver application

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# Avaya Safe Schools: Unification of SIP and IP Networking



School administrators responsible for physical security and IT can now deploy a unified solution with inherent building and campus safety when designing 21st Century learning environments.

visibility, control and prioritization, plug and play programmable radios for rapid deployment with up to 70%\* more bandwidth than competitive offerings. Simplified controller-less architecture of the Avaya WLAN 9100 series eliminates single point of failure with a broad portfolio of indoor and outdoor access points.

ALGO Communication products are open standard SIP PoE endpoints tested on Avaya Networking infrastructure delivering security, safety, and notification solutions. ALGO products Integrate with legacy paging systems, are scalable and customizable, and can be remotely

managed with a no-maintenance embedded Linux operating system. The products provide supervised connectivity, auto-multicast – scalable, G.722 Wideband Audio and H.264 Video. The value of wideband audio and ambient noise adjustment – highly intelligible voice message which can be heard over background noise – communications can be heard and understood during an emergency.

Conveyant Systems offers SENTRY, a tested Avaya SELECT PRODUCT solution, providing consolidated E911 notification capability across your schools core Infrastructure. SENTRY pulls in and correlates data from any additional source for situational awareness, including building environmental information and video link management. Built-in NENA i3 compliant NG911 capabilities offer Additional Location Data Repository (ALDR) functionality, fully customizable for solution specific requirements. SENTRY delivers routable screen pop notifications and email alarms based on location, and provides critical alarm escalation if not acknowledged. Built in reporting includes full audit trails and incident notes.

\* 70% more bandwidth is based on the following:

- Industry-standard 802.11ac, 3x3 AP:  
Radio 1 = 225Mbps (2.4GHz);  
Radio 2 = 1.3Gbps (5GHz) = Max Bandwidth = 1.525Gbps
- Avaya 802.11ac, 3x3 AP: Radio 1=1.3 Gbps (5Ghz) and Radio 2 (5GHz) = 1.3 Gbps = Max bandwidth = 2.6 Gbps

## Five Reason To Choose Avaya Safe School Solution

1. Avaya Edge Automation delivers simplified user and device provisioning, which greatly reduces change control by minimizing the number of devices to touch and therefore lowering OpEx.
2. Video surveillance technology is transitioning from analog to IP-based systems. Avaya Fabric Connect uniquely optimizes IP multicast networks by eliminating protocols known as PIM and Spanning Tree that create video surveillance network traffic. Multicast is native in Avaya Fabric Connect switches and requires no configuration or additional code stacks. This allows applications such as surveillance systems to scale to enormous size without taxing the network (or actual switches). Fabric Connect re-converges in milliseconds vs. seconds or even minutes using PIM.
3. State of the art, comprehensive, more secure access control to the wired and wireless network for both unknown and known users with Avaya Identity Engines allows administration of the end-to-end solution, with Avaya switching and WLAN products as well as any legacy devices.
4. Avaya Safe School solution is built leveraging our Team Engagement technology using session initiation protocol (SIP) technology. SIP-enablement allows for full integration of point-of-entry devices with Avaya Networking, Avaya IP Office communications systems and DevConnect partner Algo Communications security, alert and paging. The benefit is a potential for lower costs with only one system to purchase and manage - fully tested on Avaya network switching and wireless access points - rather than separate telecom, paging and security systems. One system to learn and manager.
5. Emergency 911 calls, especially ones from schools and multi-building campuses, must include details about the device making the call and its location so internal first responders can coordinate with, and provide pre-arrival assistance to, emergency first responders. In the Avaya Safe School solution, this information is generated by the Conveyant SENTRY Solution and appears in a screen pop on desktops and smartphones, thereby delivering critical details needed to accelerate response and help save lives.



## Learn More

To learn more about the Avaya Safe School Solution, please contact your Avaya Account Manager, Avaya Authorized Partner, or email [smartengage@avaya.com](mailto:smartengage@avaya.com).

## About Avaya

Avaya is a leading, global provider of customer and team engagement solutions and services available in a variety of flexible on-premise and cloud deployment options. Avaya's fabric-based networking solutions help simplify and accelerate the deployment of business critical applications and services. For more information, please visit [www.avaya.com](http://www.avaya.com).

