Creating a safer campus

Managing crisis through awareness, coordination, and multi-modal mass notification

Alcatel·Lucent
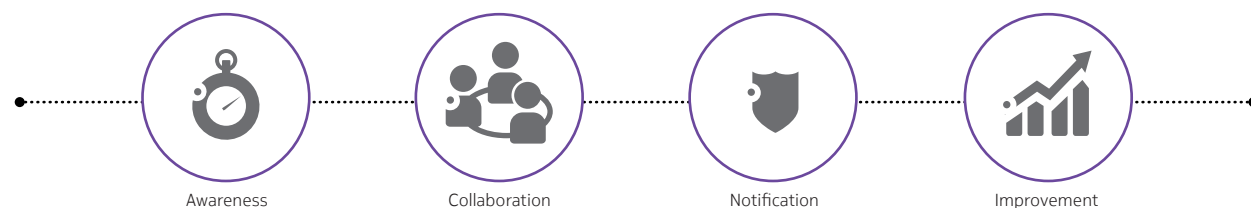Enterprise

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Protecting the campus community

A safe campus requires more than simply reacting to an event with mass notification. Ensuring the safety of everyone on campus requires:

- Awareness of the incident
- Coordination with emergency response teams
- Dispatch of a unified message to personal and campus devices
- Assessment of actions taken after the incident for the purposes of improvement

The emergency management platform must be supported by a secure, application aware infrastructure.

In this document we will discuss the importance of the above when dealing with campus threats.

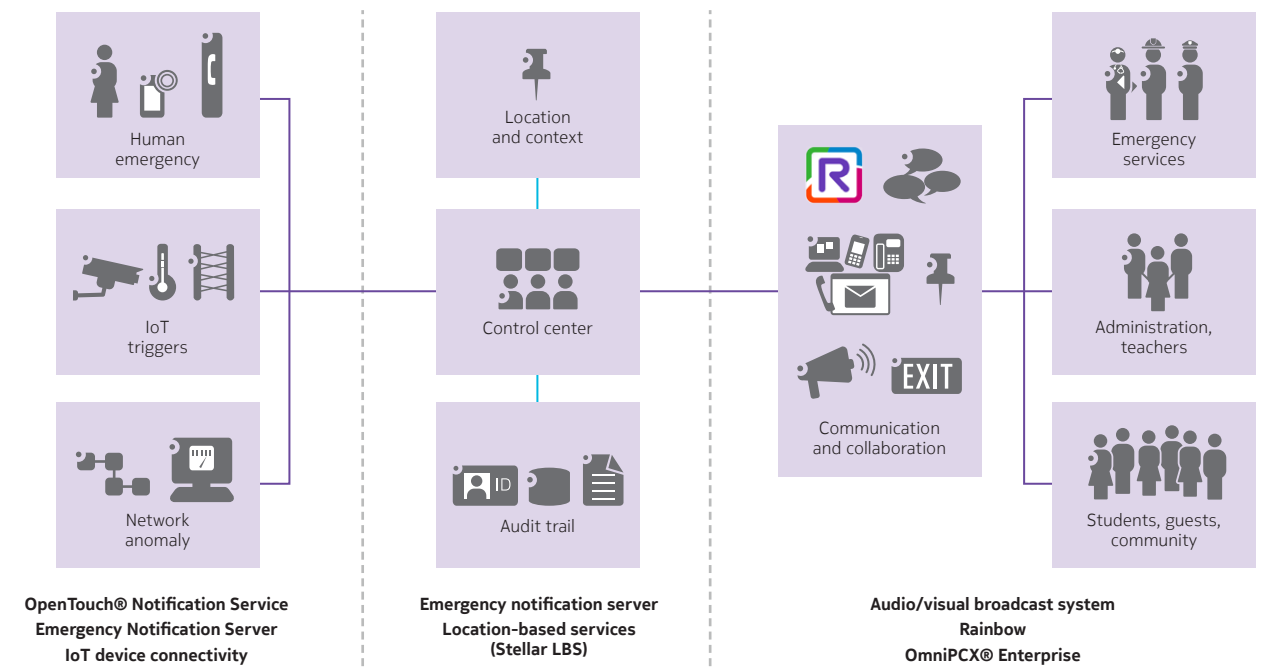Awareness   Collaboration   Notification   Improvement

Alcatel-Lucent Safe Campus solutions: Optimize campus safety

Alcatel-Lucent Safe Campus is a robust solution that accepts awareness inputs from human-initiated emergency calls, smoke/fire/gas/perimeter security alerts from IoT devices, and network management systems.
The Safe Campus control center identifies the alert location, initiates coordination and collaboration with first responders, and distributes campus-wide notifications via multiple communication channels. Valuable information is automatically collected as the event unfolds and is stored for future analysis.

Addressing a crisis

Human emergency	Location and context	Emergency services
IoT triggers	Control center	Administration, teachers
Network anomaly	Audit trail	
		Communication and collaboration	Students, guests, community

OpenTouch® Notification Service
Emergency Notification Server
IoT device connectivity

Emergency notification server
Location-based services
(Stellar LBS)

Audio/visual broadcast system
Rainbow
OmniPCX® Enterprise

Be aware. Be proactive. Be safe.

When time is of the essence, decisions need to be made quickly. In order to make informed decisions, on-campus and in-transit first responders require a comprehensive understanding of the crisis.

Real-time intelligence relies on connectivity. Internet of Things (IoT)-based solutions provide schools with the technology necessary to alert emergency personnel, collaborate with responders, and notify students, faculty, staff, and campus visitors about next steps.

Alcatel-Lucent Safe Campus solutions create a safe campus learning environment that leverage existing infrastructure investments in voice and data and enhance them with safety and security devices. The resulting end-to-end communications infrastructure can enhance the awareness and responsiveness of campus staff and security personnel, support lockdown procedures, provide emergency notification. It can also be integrated into the building control systems to enable surveillance, and provide alarms and alerts.
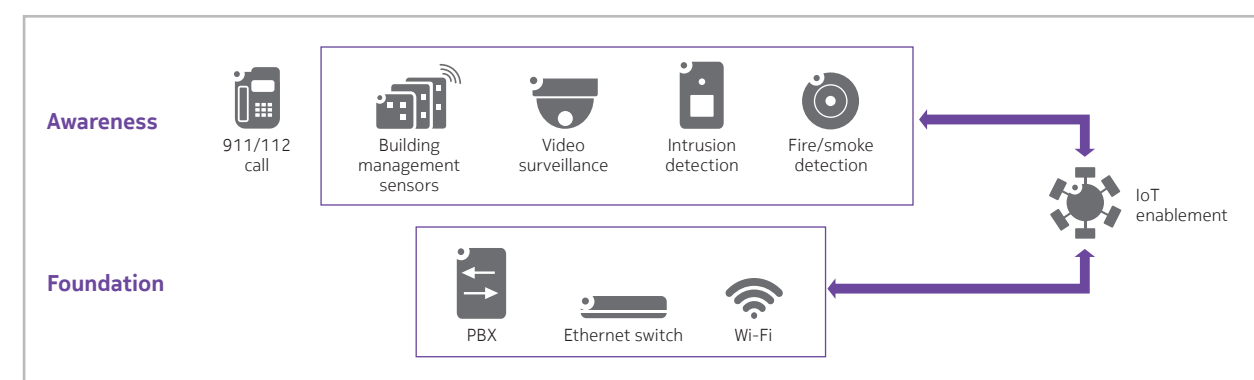
Awareness

Real-time, accurate, and actionable information provides a foundation for successful response during a crisis. With modern IoT technology schools can transform their incident response during high-stress, confusing, emergency situations.

Alcatel-Lucent Enterprise solutions provide schools with the ability to deliver an extraordinary level of safety. Connected IoT devices, from sensors to security cameras, provide emergency management personnel with real-time insight into the incident. Using sensors and geolocation technology, information about what is happening can be provided and the source of the alert can be identified.

Awareness solution:
· Alcatel-Lucent Rainbow™ (mobile app)
· Alcatel-Lucent Visual Notification Assistant

Awareness
911/112 call | Building management sensors | Video surveillance | Intrusion detection | Fire/smoke detection

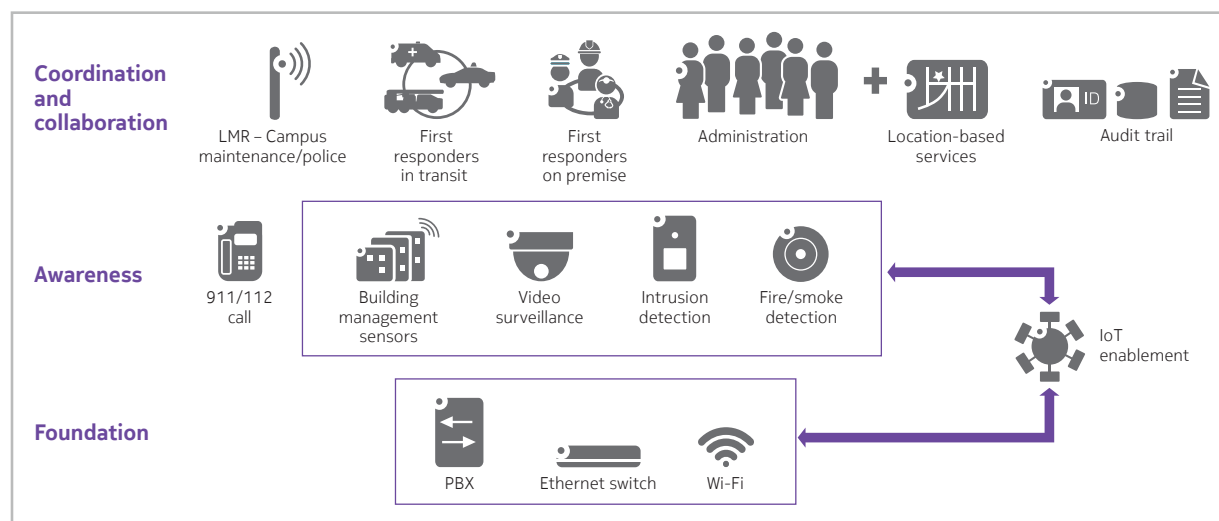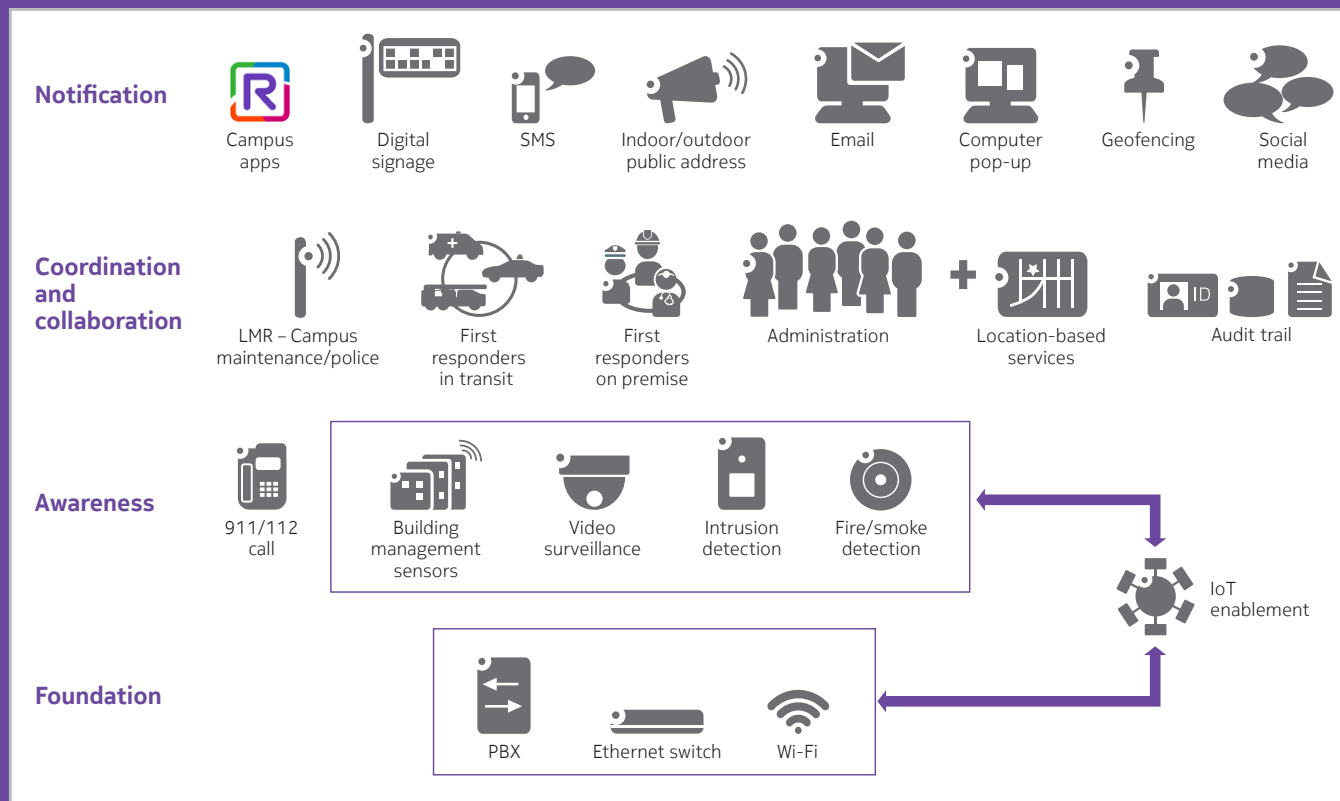IoT enablement

Foundation
PBX | Ethernet switch | Wi-Fi

Coordination and collaboration

Once on-campus personnel become aware of an incident and have obtained appropriate information, timely and thorough collaboration with on-premises, in-transit, and external first responders is essential. Alcatel-Lucent Safe Campus solutions can provide the exact location of a 911 call, push floor plans, schematics, and video surveillance feeds to first responders in order to save precious time during an emergency. Coordination can be further improved with real-time location of on-site staff and secure, encrypted audio, video, and data conferencing that provides an immediate bridge between administrators at home or in remote offices, and on-site security, staff, and first responders.

Coordination and collaboration solution:
• Alcatel-Lucent Rainbow (audio/video conferencing, screen sharing and text)
• Alcatel-Lucent Stellar Location-based services
• LMR integration with telephony system (bi-directional walkie-talkie support)

| Coordination and collaboration | LMR – Campus maintenance/police | First responders in transit | First responders on premise | Administration | + | Location-based services | Audit trail |

| Awareness | 911/112 call | Building management sensors | Video surveillance | Intrusion detection | Fire/smoke detection | IoT enablement |

| Foundation | PBX | Ethernet switch | Wi-Fi |

Notification

Notification	Campus apps	Digital signage	SMS	Indoor/outdoor public address	Email	Computer pop-up	Geofencing	Social media
Coordination and collaboration	LMR – Campus maintenance/police	First responders in transit	First responders on premise	Administration	+	Location-based services		Audit trail
Awareness	911/112 call	Building management sensors	Video surveillance	Intrusion detection	Fire/smoke detection			IoT enablement
Foundation			PBX	Ethernet switch	Wi-Fi			

Keeping secondhand and word-of-mouth communication to a minimum is key to ensure that only accurate information is made available to all students, staff, and visitors. Safe Campus solutions enable you to quickly craft and deliver mass notifications. Multi-modal notifications such as intercoms, mobile phones, SMS, campus-specific apps, email, social media, loudspeakers, digital signage and other communications technology can be used to notify those in danger, by providing evacuation and/or lockdown instructions and warning those not in immediate danger to stay away.

Additionally, IoT sensors can be activated to close and lock doors and windows, close window blinds, open emergency exits, and activate emergency lights.

Notification solution:
• Alcatel-Lucent Rainbow (audio and text)
• Alcatel-Lucent Audio/Visual Broadcast System (indoor/outdoor PA system; telephone speakers)
• Stellar Location-based services
• Alcatel-Lucent OmniPCX Enterprise Communication Server

Improvement

Lessons learned are always important. Having the capability to replay and analyze past emergency scenarios with immediate access to detailed data for each emergency call is essential. Understanding where break-downs in communication may have occurred, lag times by response teams, as well as the role of key strategic decisions can make the difference in ensuring the future safety of students, staff and visitors in any campus environment.

Make every campus a safe campus

Secure your campus with reliable, easy-to-use and cost-effective communications. Protect your students, faculty and visitors and improve response time. A robust and secure network provides the foundation to ensure flawless communications and connectivity to IoT devices, which are essential for awareness and notification.

For more information about ALE Safe Campus Solutions, visit: www.al-enterprise.com/en/industries/education/intelligent-campus/safe-and-secure-campus#safety

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