



DELIVER AI-POWERED, ENHANCED SAFETY AND SECURITY

Juniper and CriticalArc combine real-time location services and dynamic incident mapping to better coordinate on-site protection response.

Challenge

Effective incident response is crucial to minimize harm, but employees often hesitate to report threats or incidents to their organizations. When there is insufficient situational awareness and understanding, responding quickly and effectively is difficult—particularly in large premises or when security personnel are limited.

Solution

CriticalArc SafeZone's Safety, Security, Wellbeing and Emergency Management platform, paired with Juniper Indoor Location Services, driven by Mist AI and enabled with Wi-Fi and BLE, allows organizations to create a dynamic map of incidents in 3D, display the location of affected individuals, and coordinate a timely response.

Benefits

- Real-time tracking of individuals in facilities
- Efficient coordination and communication during emergencies
- Holistic views of incidents in real time
- Operational Insights for proactive risk management.

The Challenge

Employees do not always feel empowered to report impending threats or incidents to their organizations. In some scenarios, it is difficult to notify others in an emergency. They may not be in close proximity to an alarm, for example, or are located in an isolated area with no one nearby to call for assistance.

Responding to incidents in a coordinated and effective way is paramount for reducing the risk of injury, harm, and casualties—however, a general lack of situational awareness and understanding of how an incident could escalate can prevent first responder teams from taking decisive, effective actions.

This is more challenging in large buildings with multiple floors, lifts, stairways, and basement areas. Furthermore, organizations with limited security personnel often have insufficient resources to adequately respond to incidents, especially if the premises are diverse and widespread.

Traditional indoor positioning solutions, alongside staff duress alarm systems, can provide real-time location sharing for people requiring assistance. However, this provides limited awareness of the evolving threat, where it is located, and the availability of the responder team.

When incidents occur, there is no two-way, coordinated communication between individuals, the responder team, and third-party agencies such as the police who are critical in emergency situations.

Generally, the cost, maintenance, and technical support required for new technology can hinder adoption. Traditional indoor positioning solutions require access to Bluetooth Low Energy (BLE) beacons alongside Wi-Fi Access Points (APs). BLE beacons need monitoring, maintenance, and batteries replaced every five to ten years. In comparison, an AI-powered indoor positioning solution has more advanced technology is a more cost effective solution. It's more robust and reliable than other solutions that need ongoing diagnostic and technical support from IT staff.

The Juniper Mist and CriticalArc SafeZone Solution

The Juniper Mist Cloud, driven by Mist AI, offers precise indoor location capabilities, enabling organizations to share the real-time positions of individuals and assets within a building. This level of granular visibility allows for more accurate emergency response and enhances overall situational awareness. By integrating this location data with CriticalArc SafeZone's Safety, Security, Wellbeing and Emergency Management platform, organizations can create a dynamic map of incidents in 3D, display the location of affected individuals, and coordinate a timely response.



Features and Benefits

- Real-time tracking of individuals enhances their safety within buildings. In the event of an emergency, such as a fire or an active shooter situation, the system pinpoints the exact location of individuals and guides them to the nearest safe zones or evacuation routes. This capability minimizes response time and ensures that people are directed away from danger, reducing the risk of injuries or casualties.
- Efficient coordination and communication during emergencies are imperative. CriticalArc SafeZone's Safety, Security, Wellbeing and Emergency Management platform acts as a unified interface, consolidating data from various sources, including Juniper Location Services, driven by Mist AI, traditional duress systems, and location-aware devices and systems.
- Security personnel and first responders have a holistic view of an incident in real time, facilitating informed decision-making and swift response actions. Coordinating resources and directing responders to the precise locations of incidents or individuals in need of assistance is seamless, enabling a more effective emergency response.
- Juniper Mist solutions and CriticalArc SafeZone provide organizations with operational insights for proactive risk management. The system captures data on incidents, response times, and the movement of individuals within buildings. This information is analyzed to identify

patterns, assess potential vulnerabilities, and optimize emergency response plans. Organizations can gain valuable intelligence that helps them improve safety measures, identify high-risk areas, and develop targeted training programs to enhance overall preparedness.

Solution Components

CriticalArc's SafeZone is a highly scalable SaaS Microsoft Azure cloud-based infrastructure. Its open-source API platform allows for the integration of complementary technologies to create a true end-to-end, unified platform.

In this joint solution, the following Critical SafeZone components are used:

- Life-safety, mission-critical infrastructure
- Encrypted communications, real time and at rest
- Redundancy and hot standby
- Mobile technology (iOS and Android)
- Single sign-on support
- Workflow engine

Juniper Mist solutions, driven by Mist AI, offer market-leading wireless services, automation, and AI. They are part of the Juniper AI-Driven Enterprise portfolio and deliver network intelligence and automation across wired, wireless, and wide area networks.



Figure 1: CriticalArc SafeZone and Juniper Mist safety and security solution

In this joint solution, the following Juniper Mist components are used:

- Juniper Access Points are deployed on premises for Wi-Fi and BLE access.
- Juniper Mist Indoor Location Services are real-time cloud location services that combine personalization, data analytics, and operational simplicity.
- Juniper Mist User Engagement pushes location-based information to mobile users, such as turn-by-turn directions and proximity notifications.
- Juniper Mist Asset Visibility locates high-value resources and personnel with continuous updates.
- Juniper Mist Wi-Fi Assurance includes user service levels, anomaly detection, automated event correlation for troubleshooting, dynamic packet capture, policy configuration, guest WLAN access, and more.
- Marvis™ Virtual Network Assistant provides natural language queries with integrated help desk functionality for rapid and simple root cause determination and problem resolution while realizing the Self-driving Network™ with its Marvis Actions framework.

Summary

The integration between Juniper Mist solutions and CriticalArc SafeZone represents a significant advancement in safety and security solutions for organizations. By combining the real-time location capabilities in Juniper Mist with SafeZone's, organizations can achieve enhanced safety, efficient emergency response coordination, and proactive risk management. The ability to share individuals' real-time locations, dynamically map incidents, and coordinate responses significantly improves

situational awareness and empowers organizations to better protect people within their premises. With this integrated solution, the future of safety and security within buildings is brighter than ever.

Next Steps

To learn more about the joint Juniper Mist-CriticalArc SafeZone solution, please contact your CriticalArc or Juniper Mist representative, or visit <http://criticalarc.com> and www.juniper.net.

About Juniper Networks

At Juniper Networks, we are dedicated to dramatically simplifying network operations and driving superior experiences for end users. Our solutions deliver industry-leading insight, automation, security and AI to drive real business results. We believe that powering connections will bring us closer together while empowering us all to solve the world's greatest challenges of well-being, sustainability and equality.

About CriticalArc

CriticalArc provides **SafeZone®**, the unified safety, security and emergency management solution that helps large organizations keep their people safe and respond more effectively to critical incidents so they can fulfil their duty of care and mitigate risks. SafeZone fundamentally transforms the ability to manage personal safety, security, and emergency situations so organizations can respond faster and more effectively to protect their most important asset, their people. Through real-time visualization, communications, and response coordination, SafeZone streamlines operations, is easy to use and quick to deploy. For more information on CriticalArc and SafeZone, please go to www.criticalarc.com, email marketing@criticalarc.com.



Driven by
Experience™

APAC and EMEA Headquarters
Juniper Networks International B.V.
Boeing Avenue 240
1119 PZ Schiphol-Rijk
Amsterdam, The Netherlands
Phone: +31.207.125.700
Fax: +31.207.125.701

Corporate and Sales Headquarters
Juniper Networks, Inc.
1133 Innovation Way
Sunnyvale, CA 94089 USA
Phone: 888.JUNIPER (888.586.4737)
or +1.408.745.2000 | Fax: +1.408.745.2100
www.juniper.net

Copyright 2023 Juniper Networks, Inc. All rights reserved. Juniper Networks, the Juniper Networks logo, Juniper, and Junos are registered trademarks of Juniper Networks, Inc. in the United States and other countries. All other trademarks, service marks, registered marks, or registered service marks are the property of their respective owners. Juniper Networks assumes no responsibility for any inaccuracies in this document. Juniper Networks reserves the right to change, modify, transfer, or otherwise revise this publication without notice.