

A Hybrid Approach to Emergency Mass Notification

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Campuses, government agencies, military and enterprises are facing increased threats from terror, accidents and weather. Legacy fire systems are inadequate and incapable of handling the wide-spectrum of threats. The advent of new communication technologies enabled by Internet Protocol (IP) infrastructure presents excellent opportunity to address the challenge.

Protecting, informing and accounting for people quickly and effectively during emergencies is the problem addressed by AtHoc Emergency Mass Notification System (EMNS). AtHoc IWSAlerts™ network-centric mass notification currently represents the state-of-the-art in emergency alerting technology. It leverages the ubiquitous IP network and transforms an organization's existing IP network and its connected devices into a rapid and pervasive emergency notification system. A net-centric unified notification system can reach people through multiple redundant channels in minutes—with detailed information for a safe course of action. Additionally, emergency managers can provide detailed instructions for action to all personnel and receive feedback to ensure a safe response—a capability absent on traditional passive alerting systems.

When implementing a net-centric emergency mass notification technology, there are deployment options, including hosted (Software as a Service, cloud), on-premise (at customer's location) and hybrid emergency mass notification solution deployment.

Cloud Computing Deployment

A cloud deployment approach eliminates the need for on-site hardware, providing a lower cost of ownership for some enterprises. Organizations may need to provision services in the cloud when demand on their internal computing resources exceeds capability. A drawback with this method is that local integration is not possible, so there is no connecting with Active Directory and other on-premise services.

The cloud option is a viable option for emergency mass notification deployments by public safety and national security organizations constantly searching for ways to deliver the best safety and security services while reducing costs. There are additional savings opportunities with cloud provisioning. Emergency management agencies can reduce the number of servers they need, which adds to operational savings in the form of power consumption saving, server provisioning costs and saving on IT professionals.

A valuable benefit of the cloud is risk mitigation for business continuity and disaster recovery. While systems may be down at an organization's headquarters, cloud deployment enables access to emergency managers from any IP-connected device, along as the manager has the proper access security authorization.

On-Premise Mass Notification

An on-premise solution on site at the customer's location places the mass notification solution behind the customer's firewall. Data is protected and vital lists such as an Active Directory can be used to update alert recipient's contact information, ensuring accurate contact data is available when needed.

On-premise emergency notification solutions enable enterprises to alert personnel quickly, effectively and securely via IP-connected personal devices such as computers, telephones and cell phones. Additionally, with an on-premise system, mass notification solutions can be readily integrated with legacy mass notification devices such as Giant Voice, private branch exchange, fire alarms, physical security sensors and other traditional alerting systems.

Another emergency alerting model is to use Software as a Service (SaaS) for on-demand mass notification alerting. Available as a service from a remote hosting facility, this approach in the "cloud" offers economies of scale as organizations can leverage mass notification solutions with committed capacity and additional available capacity without taxing local communication services. This method also speeds deployment as there is no additional equipment to install.

Hybrid Mass Notification Approach

A hybrid solution approach combines the strengths of having an on-premise system that taps into cloud-provisioned distributed communications services for notification delivery. With an off-site hosted notification delivery system (SaaS, cloud provisioned) for telephony, local resources are not stretched because the delivery resources are external. Redundancy is built in the architecture of the distributed notification delivery systems so emergency managers have access to communications when other systems are down on site. This failover capability enables leveraging out-of-enterprise capacity and offers redundancy and continuity of operations for emergency alerting.

At the same time, the sensitivity of the information (such as alert scenarios, recipient lists and contact details) is not compromised because it resides on premise, protected behind the customer's firewall. The customer is in full control; only the data that is needed to deliver a certain alert (such as alert and recipients contact details) is securely transmitted to the distributed communication services to make the phone calls. This data is transient only, no sensitive data is stored remotely in a persistent manner. A local on-premise system can also tap into local notification delivery systems such as outdoor and indoor speaker systems, digital displays and more.

A hybrid deployment enables organizations to employ multiple models for their critical emergency alerting needs, providing a mass notification solution deployment tailored to individual organization needs. Hybrid offers flexible deployment models without compromising data security, sensitivity and privacy.

The hybrid model enables customers to lower capital investments with all the features and functionality necessary for effective mass notification while addressing security and network topology concerns. By enabling customers to lower capital investments, AtHoc is removing the barrier to entry for customers and setting the standard for network-centric mass notification deployment.

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