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Final Copy of Case Study

LOCATION:
Broomfield, CO, US

YEAR:
2011

STATUS:
Laureate

CATEGORY:
Safety & Security

ORGANIZATION:
New York State Emergency Management Office

ORGANIZATION URL:
http://www.semo.state.ny.us/

PROJECT NAME:
NY-ALERT

PROJECT OVERVIEW

NY-ALERT is New York State all-hazards alert and notification system. Part of New York's ongoing commitment to provide critical emergency-related information and how to respond accordingly, NY-ALERT protects New Yorkers with this vital notification system. Sybase 365 enables NY-ALERT to send out notifications to 3.6 million subscriber's mobile devices. NY-ALERT is a statewide mass notification system that allows schools, universities, county governments, the NYS Department of Transportation, the State Office of Counter Terrorism, and others, to notify New York residents via a variety of means, including fax, pager, e-mail, automated phone call, RSS feed to the Web site, and SMS text message. Understanding today's mobile society, NY-ALERT alerts can be proactively sent to mobile subscribers versus broadcast on the TV or radio. The New York State Office of Emergency Management launched NY-ALERT encompassing 800 different entities at 160 organizations to send out alerts. 60 out of 64 campuses of the State University of New York use it, as do all 23 campuses of the City University of New York. NY-ALERT also services 31 counties, and 19 state agencies, and continues to grow. Besides weather and traffic alerts, citizens can sign up at the NY-ALERT Web site to get Amber and Missing Child Alerts, public health alerts such as flu vaccine clinics, consumer protection board news, sex offender re-location alerts, and state and local government press releases. "When we launched NY-ALERT, we used SMTP (e-mail) to SMS gateways to send messages to the wireless carriers. The problem we encountered was that we were reaching a volume where message delivery was being slowed by the carriers or being blocked as spam. The carriers were simply running out of bandwidth," says Ross. Then NY-ALERT developed a new system to speed its processes. "We have a Sybase 365 aggregator at our main data center in Albany and a back-up in a second, secure location. Both are Tier 1 aggregators that manage the flow of messages to the carriers so that we never flood them with more messages than they can send at once. The system also tells us when there are outages, and, if so, can dynamically switch between carriers. This new solution was crucial to enabling us to weather – no pun intended -- this winter's storms and process the massive

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number of messages," explains Ross.

SOCIETAL BENEFITS

When events happen that can put lives at risk, the ability to immediately alert those potentially in harm's way is extremely important. In a largely populated state such as New York this becomes especially vital, NY-ALERT sends messages to its citizens in minutes, ensuring the state stays knowledgeable and safe.

PROJECT BENEFIT EXAMPLE

NY-ALERT has 6.3 million subscribers, including 3.6 million people receiving alerts on their mobile phones, increasingly through text messages. The organization is adding 10,000 new subscribers each month. Every day between 1,400 and 1,800 different alerts are disseminated to different groups within the state of New York. That can generate a huge amount of traffic. Kevin Ross, Assistant Director for Technology at the New York State Division of Homeland Security and Emergency Services, explains, "During one of this winter's storms that hit New York City and surrounding counties, we sent one million text messages in 15 minutes, along with 388,000 phone calls and 4 million e-mails. In the last eight months, we sent out 156 million e-mails and 93 million text messages. That's up 4 times and 9 times, respectively, from the same period a year ago." NY-ALERT allows users to sign up only for the alerts they want. It has handled missing person alerts to residents within a 2-mile radius of a city that resulted in just 10,000 text messages. Localizing efforts such as this helps eliminate unnecessary notifications. Besides the volume of text messages it can handle, NY-ALERT knows right away if a text message was delivered to AT&T or T-Mobile users. This eliminates all doubt about delivery for the team behind the scenes at NY-ALERT.

IS THIS PROJECT AN INNOVATION, BEST PRACTICE? Yes

ADDITIONAL PROJECT INFORMATION

Ross looks at the future, "We are working on adding MMS (Multimedia Messaging Service) to Version 3.0 of NY-ALERT. MMS will let us embed photos for Missing Child Alerts, or, down the road, maps of traffic congestion and detours. Or for special needs populations, we could send messages as audio .wav files via MMS instead of straight texts. We are also working on iPhone and Windows Mobile apps for subscribers as well as notifiers. These will all become more popular along with 4G technology."