

New York City VoIP E9-1-1 Success Story

Intrado® V9-1-1SM Mobility Service

Date: July 7, 2005
Organizations: New York City Department of Information Technology, Verizon,
leading VoIP Service Providers

Situation

In February of 2005, New York City contacted Intrado, Verizon, and the nation's leading VoIP service providers (VSPs) to request the parties collaborate on a solution for routing VoIP 9-1-1 calls into the dedicated wireline 9-1-1 network. Intrado had the technical capabilities in place to deliver E9-1-1 for VoIP through its V9-1-1SM Mobility Service but external operational and regulatory dependencies had prevented Intrado from deploying this comprehensive solution for its customers.

E9-1-1 delivers a Master Street Address Guide validated address and call-back number information (referred to as automatic location information, ALI, and automatic number information, ANI) to the call taker at the correct PSAP whenever someone makes a 9-1-1 call. New York City directed that the VoIP E9-1-1 solution be consistent with the emergency procedures and processes utilized by the public safety community in the wireline 9-1-1 environment today.

On June 3, 2005, the Federal Communications Commission mandated that all VSPs interconnected to the public switched telephone network provide E9-1-1 with their consumer VoIP offerings. The E9-1-1 requirement is expected to go into effect on November 28, 2005.

Opportunity

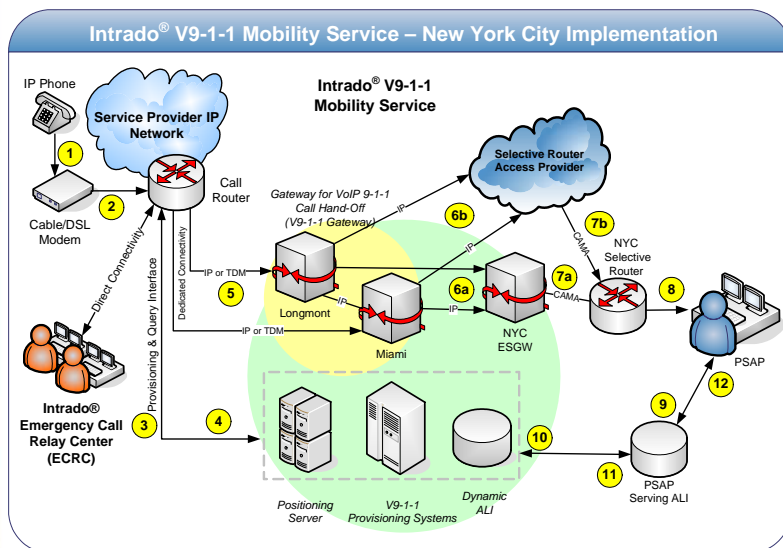
Close coordination, and the leadership provided by the New York City Department of Information Technology and Telecommunications (DOITT) enabled all involved parties to pursue and overcome operational and regulatory barriers to fully deploy the Intrado V9-1-1 Mobility Service. As a result VSP customers served by the New York City PSAP would be able to benefit from E9-1-1 months before the FCC ruling would take effect. The New York City deployment presented the opportunity to define how VoIP E9-1-1 would be delivered in an FCC-compliant manner, serving as a benchmark for the 9-1-1 community going forward.

Solution

Representatives from New York City DOITT, Intrado, Verizon and the leading VSPs immediately collaborated to drive deployment of V9-1-1 Mobility Service. Specifically, all parties agreed to work toward the following requirements:

- ✦ Be consistent with the anticipated FCC Order requirements
- ✦ Deliver the call natively into New York's existing dedicated wireline 9-1-1 Network via Intrado's Dedicated IP Network
- ✦ Provide a Master Street Address Guide (MSAG)-valid address and call back number to the 9-1-1 call taker
- ✦ Limit any Impact to public safety process and procedures
- ✦ Be deployed on July 7, 2005
- ✦ Scale to a nationwide solution

Intrado V9-1-1 Mobility Service call flow diagram.



1. VoIP Service Provider (VSP) customer calls 9-1-1
2. VSP receives customer's 9-1-1 call
3. VSP requests call routing instructions from Intrado IPS
4. Intrado IPS responds to VSP with call routing instructions to route call to Intrado VoIP 9-1-1 Gateway (including pANI/ESQK assignment)
5. VSP routes VoIP 9-1-1 call to Intrado VoIP 9-1-1 Gateway over dedicated IP network (IP) or over dedicated private lines (TDM)
6. A: Intrado VoIP 9-1-1 Gateway accepts VSP VoIP 9-1-1 call and sends to remote Intrado IP Gateway (located in NYC) over the primary dedicated IP network
B: In case of network issue Intrado VoIP 9-1-1 Gateway accepts VSP VoIP 9-1-1 call and sends to Selective Router Access Provider over the secondary connection
7. A: -Intrado IP Gateway passes call to SR over dedicated trunk
B Selective Router Access Provider passes call to SR over dedicated trunk
8. Selective router transports the call to the PSAP using pANI received with the call
9. PSAP queries ALI database with pANI
10. ALI steers to the Intrado Dynamic ALI database
11. Intrado returns ALI including subscriber's name, address and CBN
12. ALI display is sent to the PSAP by the ALI node

Ramifications

As a result of this precedent setting deployment, Intrado, New York City and other project participants confirmed the validity of the Intrado V9-1-1 Mobility Service and authoritatively demonstrated its ability to provide robust VoIP E9-1-1 service for Intrado's VSP customers and their subscribers served by the New York City PSAP.

This solution was enabled by satisfying three critical conditions; 1) provision of 9-1-1 call routing instructions based on the caller's physical MSAG valid location, 2) establishment of 9-1-1 network access via the Intrado Emergency Services Gateway, and 3) interconnection between that gateway and New York City's 9-1-1 selective router.

Further, the solution anticipated and was proved to be consistent with the FCC mandate for VoIP E9-1-1, enabling Intrado's VSP customers to offer an FCC complaint solution in a city with one of the nation's highest concentrations of VoIP users. Intrado demonstrated that the solution could be quickly deployed and scaled towards a nationwide solution while complementing existing PSAP operations.

Contact Us Today

Contact us today to learn more about Intrado V9-1-1 Mobility Service or any of our related offerings at 1.877.856.7504 or info@intrado.com.

About Intrado

For over two decades Intrado, the global expert in dynamic communications solutions, has played a pivotal role in defining and evolving the current 9-1-1 infrastructure. The company's unparalleled data management and delivery capabilities serve as the foundation for the nation's emergency communications network. Intrado sets the standard for 9-1-1 database management and call routing, providing solutions for the nation's leading wireline and wireless carriers, and Voice over Internet Protocol (VoIP) providers.

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