

## Video Relay Service: E911 Solution for Deaf and Hard-of-Hearing VRS Users

### Success Story

#### At-A-Glance

##### *The Organization*

##### **Snap!VRS**

- A leading IP video relay service (VRS) provider that delivers real-time communications for the deaf and hard-of-hearing using American Sign Language (ASL)
- Headquartered in New York state, with call centers and offices throughout the US
- Serves users across the US

##### *The Challenge*

- Ensure 911 calls placed by users are delivered to the appropriate Public Safety Answering Point (PSAP) in their geographic region
- Ensure emergency responders are provided with accurate location information to quickly locate 911 callers
- Meet FCC E911 regulations for VRS providers
- Provide rapid, reliable, and continuous E911 support for users

##### *The Solution*

Implemented the 911 Enable Emergency Routing Service (ERS) to:

- Accurately route 911 calls to the appropriate PSAP
- Deliver users' accurate location information to the PSAP
- Comply with FCC E911 regulations
- Provide users with continuous access to the most resilient and reliable E911 call routing network in the industry

#### The Organization

Snap!VRS is a video relay service that delivers a high quality and convenient relay experience between



people who use American Sign Language (ASL) and spoken English. Whether at home or in the office, relay users enjoy fast connections to experienced and professional ASL interpreters that are available anytime from a variety of video phones. Snap!VRS is committed to delivering video relay service with integrity and excellent customer service.

#### The Challenge

Video Relay Service (VRS) allows individuals who are deaf and hard-of-hearing to use their native language, American Sign Language (ASL), to communicate with hearing callers. To place a call, the VRS user first connects to a Snap!VRS interpreter. The interpreter then bridges the call from the user to the hearing party and acts as an intermediary, translating between spoken word and ASL.

Though this service dramatically improves telephony communication for individuals who are deaf or hard-of-hearing, it faces a number of challenges when it comes to E911.

Snap!VRS faced four key E911 challenges:

**1. E911 Call Routing**

To provide E911 service for a VRS user, the VRS interpreter requires connectivity to the Public Safety Answering Point (PSAP) serving the caller's geographic location. Without an E911 call routing solution, the interpreter may only connect with their local PSAP, and cannot connect to the appropriate PSAP for emergencies occurring outside their local PSAP's geographic boundaries.

**2. Address Provisioning and Location Delivery**

When 911 is dialed by a VRS user, the PSAP needs to receive their location, rather than the location of the VRS interpreter who is serving as the intermediary. Accurate, detailed location information allows emergency responders to arrive on-scene as quickly as possible. Snap!VRS needed an E911 solution that would deliver the VRS user's up-to-date E911 location information to the PSAP. It was important that user addresses could be easily added and updated, and that the E911 solution would simplify E911 management and reduce the number of provisioning errors.

**3. Compliance with E911 Regulations**

The FCC requires that VRS providers deliver to PSAPs a 911 caller's registered location and callback number (also known as an ANI). Without an E911 solution, the PSAP would automatically receive the interpreter's location and callback number instead of the user's information.

**4. Quality and Reliability**

The final challenge Snap!VRS faced was finding an E911 solution that met its high standards for quality and reliability. The E911 solution had to meet one of Snap!VRS's principle corporate goals: to provide users with the highest level of service possible.

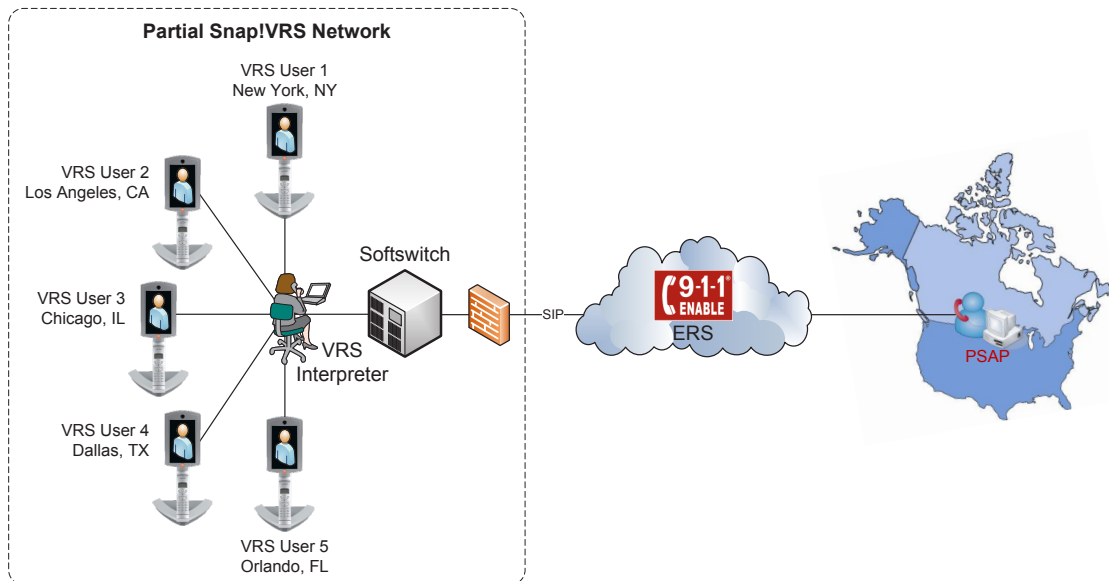
## The Solution

Snap!VRS selected 911 Enable's Emergency Routing Service (ERS), to address their E911 challenges. The ERS is a hosted service that provides E911 connectivity to over 6,000 PSAPs across the US.

Integrating an E911 solution with VRS service is essential to enable a smooth flow of information in emergency situations. With traditional TTY service, users type an average of 40 words per minute (wpm), only 20% of the 200 wpm spoken average. In contrast, an average deaf/hard-of-hearing person can sign the equivalent of 200 wpm in ASL, their native language. By providing E911 service using VRS capabilities, users can communicate the nature of their emergency and receive emergency assistance at a rate of speed similar to their hearing counterparts, far more quickly than a TTY service would allow.

### **Accurate E911 Call Routing**

911 Enable's ERS is a centralized call routing solution that allows Snap!VRS interpreters to connect users to PSAPs across the US via a single SIP trunk. When 911 is dialed, the interpreter sends the caller's ANI (i.e. callback number) to the ERS. The ERS uses the ANI to determine the appropriate PSAP for call routing, and delivers the call (via the VRS interpreter) accordingly. The ERS offers the largest call routing coverage in the industry, ensuring 911 calls are routed to the correct PSAP whether the user is five or 5,000 miles away from the interpreter.



### **Address Provisioning and Location Delivery**

911 Enable's ERS includes a national ALI database that allows Snap!VRS to transmit a user's location to the appropriate PSAP when 911 is dialed. When the ERS has determined the appropriate PSAP for call routing purposes, it delivers the call (via the VRS interpreter) and ANI to that PSAP. The ANI is used to instantaneously retrieve the caller's location from the national ALI database, and the address is then displayed on the dispatcher's screen. Locations may be provisioned to the level of granularity best-suited to the user's dwelling (i.e. house, apartment, etc.), ensuring emergency responders have the most precise information possible to quickly find 911 callers.

**"We trust 911 Enable to provide our users with extremely fast, reliable E911 call routing in emergency situations. Their flexible, collaborative approach is more akin to a partnership than a traditional vendor-client relationship."**

**Keith Podgorny**  
*Vice President of Technical Services*  
**Snap!VRS**

The ERS also helps reduce the administration necessary to ensure locations in the national ALI are accurate and up-to-date. 911 Enable provided Snap!VRS with a SOAP/XML interface that integrates with their subscriber database. Whenever user locations are added or updated, they are automatically validated and provisioned in the national ALI database, in real-time. The national ALI accepts normalized addresses, which reduces the overall occurrence of provisioning errors without impacting the quality of address information. Any validation errors that do occur are automatically returned with suggested alternatives, minimizing the burden associated with correcting address provisioning errors.

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### ***Compliance with E911 Regulations***

By implementing the ERS, Snap!VRS can meet the FCC's E911 requirements for VRS services. User locations may be added or updated in the ERS national ALI database in real-time, ensuring the VRS user's accurate callback number (ANI) and location information are instantaneously displayed on the dispatcher's screen when the 911 call is answered.

### ***Quality and Reliability***

When evaluating E911 solutions, Snap!VRS found that the ERS offered quality and reliability which exceeded their high service standards. Offering 24/7/365 E911 call routing and location delivery services, 911 Enable's resilient and reliable network infrastructure is built to the high standards necessary for emergency services. Since 2005, it has delivered 100% up-time while handling an average of 20,000 911 calls per month. Snap!VRS deployed the ERS with confidence that their users would receive the same quality of E911 service as traditional telephony users.



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Call 1-877-862-2835  
Visit [www.911enable.com](http://www.911enable.com)  
Email [sales@911enable.com](mailto:sales@911enable.com)

## Additional Resources

Emergency Routing Service Data Sheet for the US

[http://www.911enable.com/pdf/emergency\\_routing\\_service\\_datasheet.pdf](http://www.911enable.com/pdf/emergency_routing_service_datasheet.pdf)

Emergency Routing Service Data Sheet for Canada

[http://www.911enable.com/pdf/emergency\\_routing\\_service\\_datasheet\\_canada.pdf](http://www.911enable.com/pdf/emergency_routing_service_datasheet_canada.pdf)



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