

RedSky HorizonSM Network Solutions

THE INTELLIGENT PATH TO NG9-1-1

Overview

The vision for the Next-Generation 9-1-1 (NG9-1-1) network has been defined as a standards-based SIP network that connects PSAPs together and enables voice, data, text and video emergency traffic. Leading industry emergency service providers, working under the umbrella of the NENA i3 standard, have developed and tested interoperable network elements for NG9-1-1. 9-1-1 Authorities and Public Safety Answering Points (PSAPs) now are charged with the planning and implementation of NG9-1-1 networks for city, county and state emergency services networks.

Successful deployment of NG9-1-1 networks requires careful planning and a roadmap of standards-based, i3-compliant components including Emergency Services IP networks (ESInets), IP-based software services and applications, databases and data management processes and transition elements that can interconnect legacy PSAP premise equipment to the NG9-1-1 network.



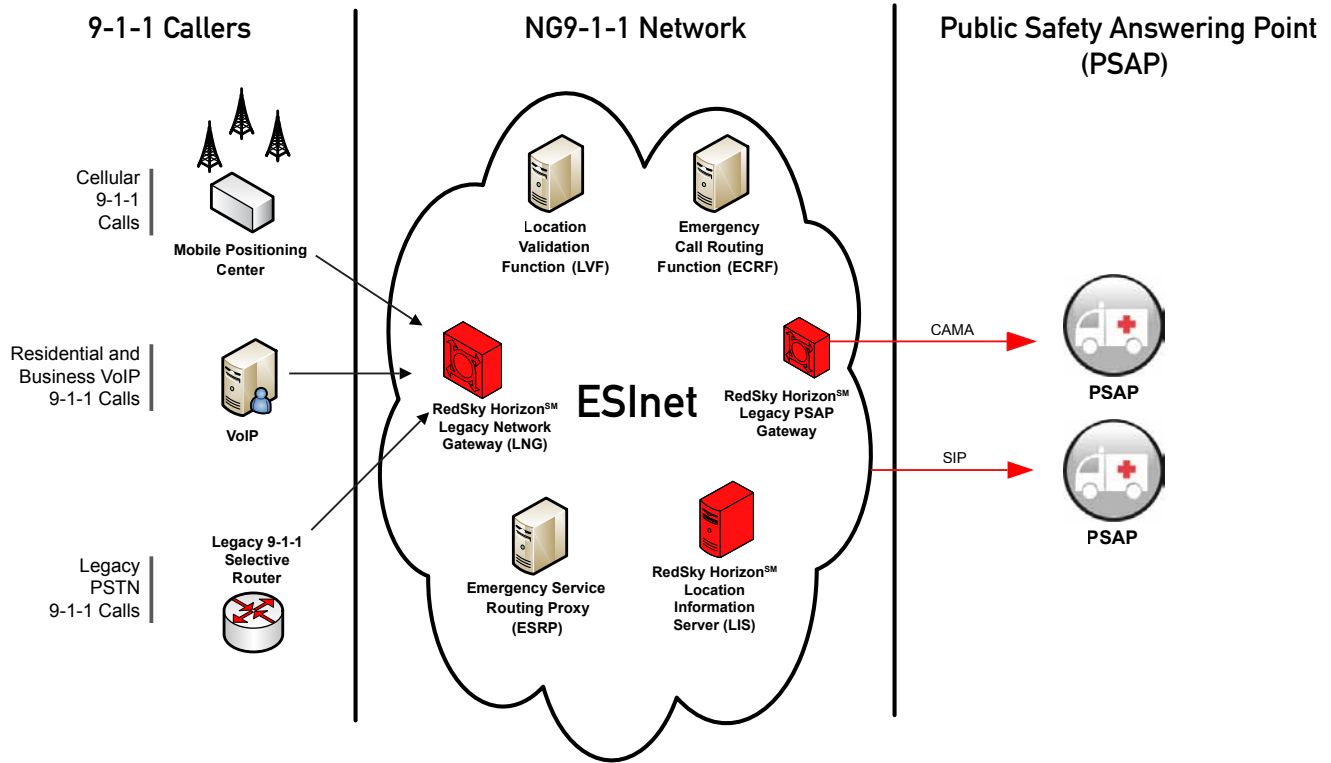
Introducing RedSky HorizonSM Network Solutions

RedSky has leveraged more than 15 years of enterprise E9-1-1 leadership, including active participation in the i3 standards development process, to create the RedSky HorizonSM family of network solutions to help public safety, government and military customers quickly and cost effectively adopt i3 standards and embrace NG9-1-1.

LOCATION INFORMATION SERVER >>

LEGACY NETWORK GATEWAY >>

LEGACY PSAP GATEWAY >>



REDSKY HORIZONSM LOCATION INFORMATION SERVER

The patented RedSky HorizonSM Location Information Server (LIS) is the key NG9-1-1 network element for receiving, storing and delivering the location data of any device used to dial 9-1-1 during an emergency. This universal location service is designed to fill the void left by the transition from the legacy ILEC-based 9-1-1 system to the i3 NENA Specification environment.

HOW IT WORKS

Every service provider needs an automated mechanism to provide moves, adds and deletions to a PSAP's location database. The RedSky HorizonSM LIS delivers NENA-standard data formats to PSAPs for fixed device service orders, and obtains and delivers real-time location information for devices such as mobile phones, smartphones and enterprise Wi-Fi phones that are constantly moving.

FIXED LOCATION DATA

The RedSky HorizonSM LIS supports NENA 2.1 and NENA 4 Service Order inputs from service providers to begin the validation process, report SOI errors, store valid location data, create XML-based location objects (PIDF-LO), and respond to queries as emergency calls enter the ESInet.

DYNAMIC LOCATION DATA

The RedSky HorizonSM LIS also supports NENA's E2 interface over IP to communicate with legacy elements and determine the location of network-connected devices. For example, the LIS determines the location of mobile phones by querying MPCs and GMLCs to get the pANI and the X, Y coordinate data of the caller.

ABOUT US

RedSky is the leading provider of E911 solutions with more customers, more technology, and more experience than any other provider. More than a million workers, students, guests and visitors rely on RedSky for E911 protection. RedSky delivers a full suite of on-premise and cloud-based software solutions and services for virtually any telephony platform to help organizations of all types capture, manage and deliver the detailed location information necessary to provide effective 9-1-1 emergency response, comply with state E911 regulations and meet business requirements for safety, risk management and efficiency.

LEGACY GATEWAYS

RedSky also has developed two Legacy Gateway products that provide critical transitional capabilities to 9-1-1 Authorities and PSAPs who are managing the migration toward NG9-1-1 in measured, incremental steps.

REDSKY HORIZONSM LEGACY NETWORK GATEWAY

The first step in properly handling a 9-1-1 call in a NG9-1-1 environment is getting the call in to your private ESInet. The RedSky HorizonSM Legacy Network Gateway (LNG) provides the on-ramp for emergency calls from the PSTN from both SS7 and CAMA trunks by translating them into SIP-based signals that can be routed over your secure, private IP networks for handling by the appropriate emergency entity. Intelligence in the RedSky HorizonSM LNG also starts the process of building the Location Object (PIDF-LO) associated with the incoming 9-1-1 call.

REDSKY HORIZONSM LEGACY PSAP GATEWAY

Delivering IP-based emergency calls to the vast majority of PSAPs using traditional CPE requires the RedSky HorizonSM Legacy PSAP Gateway (LPG). The RedSky HorizonSM LPG translates an IP call into traditional CAMA signaling for handling, making it possible for PSAPs to gain the benefits of IP-based networks without upgrading CPE. The RedSky HorizonSM LPG stores the location data received in the PIDF-LO and formats it as a response to a traditional ALI Query. Additionally, intelligence in the RedSky HorizonSM LPG creates the SIP messaging needed to initiate conference calls and transferred calls.