



Emergency Routing Service

Emergency Routing Service (ERS) provides organizations with E911 call routing and enhanced location delivery to over 6,000 Public Safety Answering Points (PSAPs) across the United States. Using a single redundant SIP or PSTN connection, ERS delivers your 911 call to the right PSAP with the caller's location information.

Key Features and Benefits:

- Helps enterprises comply with state and federal E911 regulations
- Flexible architecture allows for SIP or PSTN call delivery
- Native integration with Intrado's Emergency Gateway, Microsoft Direct Routing, and Cisco Emergency Responder
- Delivers E911 coverage across the U.S. and Canada
- End-to-end Intrado call routing network is built with carrier-grade, redundant data centers
- Includes security desk call routing and notification features that provide situational awareness to allow enterprises to enhance their internal emergency response
- Optional Location Manager application offers automated location tracking for softphones to help keep their locations up-to-date
- Intrado-operated, U.S.-based 24/7/365 Emergency Call Response Center provides additional back-up call routing capabilities
- Can be implemented in as little as 24 hours, and offers, easy-to-use web-based management and reporting capabilities

Compatible with the widest range of VoIP equipment vendors for seamless E911 integration

Streamlined service, quality control and reliable network infrastructure

Complex environment support, such as multiple UC vendors deployed on premise, hosted, or in hybrid environments

1,000+

Trusted to safeguard over 1,000 organizations

60M

Over 60M VoIP records under management

Emergency Routing Service Components

ERS Portal

The ERS Portal is a web-based dashboard that provides administrators with access to the ERS account for configuration, record provisioning and reporting.

ERS API

The ERS API enables enterprises to automatically add, modify and delete provisioned locations and users, through integration with enterprise subscriber management tools.

Provisioning Server

The Provisioning Server geocodes and validates locations for insertion into the National ALI Database.

National ALI Database

The National ALI Database contains user location records that can be retrieved via the Regional ALI Databases for display at the PSAP.

911 Call Server

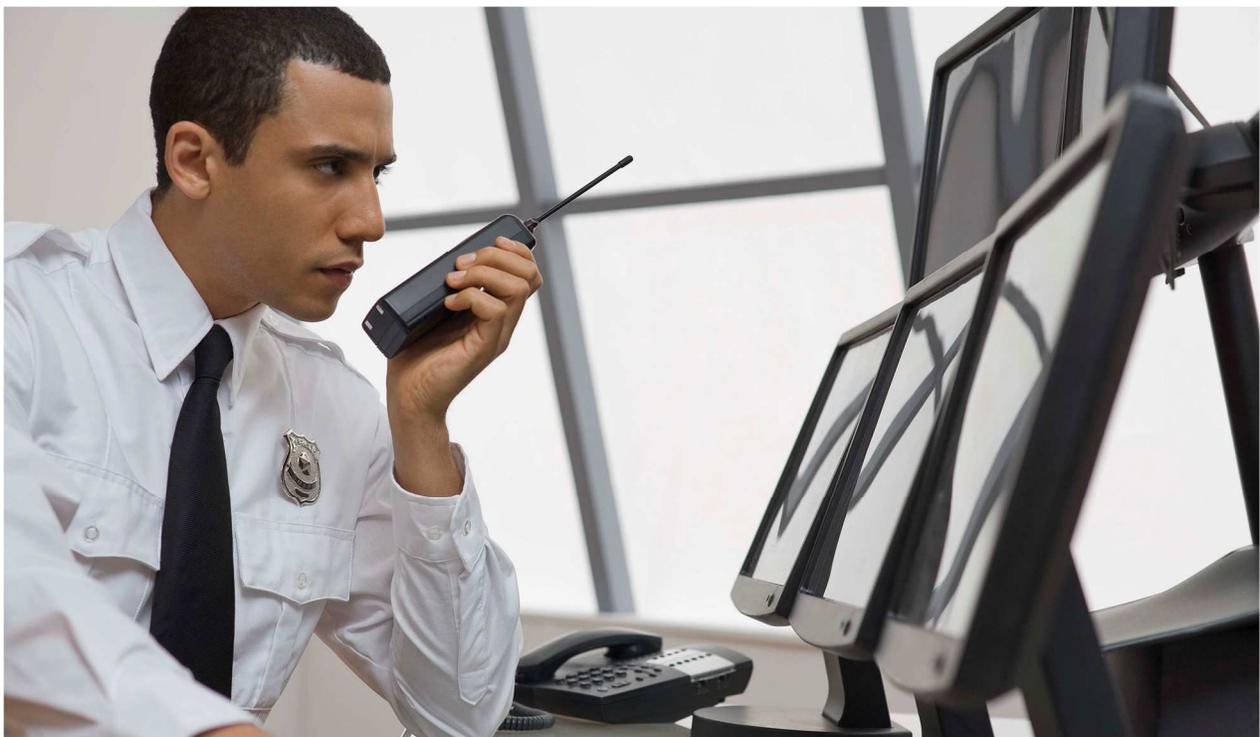
The 911 Call Server receives 911 calls and determines the appropriate routing actions based on the location of the caller and relevant call routing configurations.

911 Call Routing Network

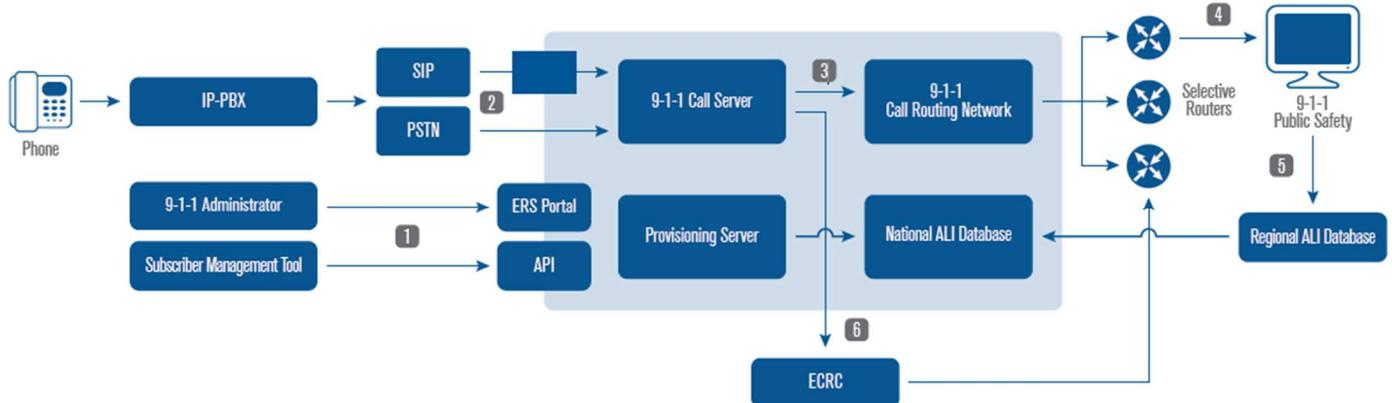
The 911 Call Routing Network serves as an interface between ERS and the 911 infrastructure throughout the U.S.

ECRC

Emergency Call Response Center (ECRC) handles unprovisioned and failover 911 calls. The U.S.-based ECRC is staffed by APCO-trained dispatchers, who orally confirm the caller's location and transfer the call via the selective router network to the appropriate PSAP.



Emergency Routing Service Architecture



Data and Call Flow

1. The enterprise validates user and location records in the ERS Provisioning Server using the ERS Portal or ERS API. These records are then stored in the ERS National ALI Database.
2. A user makes a 911 call. The call is routed from the enterprise's IP-PBX or UC system via SIP or PSTN to the ERS 911 Call Server.
3. The 911 Call Server retrieves the location of the caller from the National ALI Database and routes the call to the 911 Call Routing Network.
4. The 911 Call Routing Network directs the call to the appropriate selective router, which then delivers the call to the local PSAP.
5. The PSAP retrieves the user's location record from the ERS National ALI Database using a connection through the Regional ALI Database.
6. In a failover/unprovisioned call scenario, the 911 Call Server directs the call to the ECRC for location verification and routing.

Specifications

Data Centers	<ul style="list-style-type: none"> • Geo-Redundant Data Centers • Active-Active load-balanced call servers • Flexible connectivity via Internet, VPN, NNI 	Address Validation and Provisioning	<ul style="list-style-type: none"> • Real-time address validation and geo-coding • Link with geo-coordinates for address mapping • Simplified error correction process
Call Delivery	<ul style="list-style-type: none"> • SIP and PSTN connectivity • Network monitoring with SIP options • SIP UDP/TCP protocols • RTP/UDP with G.711 • Configurable dial plans for emergency and test calls • Individual PSTN number for routing contingency on failover 	Administrative ERS Portal	<ul style="list-style-type: none"> • Secure portal for service administration • Easy provisioning of records • Batch files for bulk provisioning • User profiles for managing access levels • Individual sub-accounts for separating access to records and reports • Comprehensive reporting - call records, locations and subscriber, provisioning audits • Portal branding for service providers
Integrations	<ul style="list-style-type: none"> • Intrado Emergency Gateway • Microsoft Phone System Direct Routing • Certified with Skype for Business • Cisco Emergency Responder with native integration for provisioning • Certified with Avaya Aura Communication and Session Managers • Most IP-PBX/UC platforms and softswitches using SIP trunking 	Provisioning ERS API	<ul style="list-style-type: none"> • SOAP XML API for address validation and provisioning • Real-time provisioning of records • Secured with TLS encryption • Customer Lab for API development
911 Call Routing Network	<ul style="list-style-type: none"> • U.S. and Canada 911 coverage • E911 connectivity to over 6,000 PSAPs 	Documentation	<ul style="list-style-type: none"> • ERS Technical Support Policies • ERS Network Interface Guide • ERS Portal User Guide
Emergency Call Response Center (ECRC)	<ul style="list-style-type: none"> • U.S.-based and operated by Intrado • APCO-trained 911 call takers • 24/7/365 operations • Enhanced transfers to PSAPs using emergency lines with location (AL) delivery • Support for unprovisioned calls and remote workers; back-up answering point for contingency routing 	Subscription	<ul style="list-style-type: none"> • Monthly subscription • Fee based on the number of endpoint records
Test Calls	<ul style="list-style-type: none"> • Built-in testing with configurable test call number • Playback of call details including address and 911 coverage • Two-way audio verification • Email confirmation of every test call with results 	Regulatory Compliance	<ul style="list-style-type: none"> • Compliant with current state E911 legislation • Compliant with current FCC E911 regulations
911 Call Notification	<ul style="list-style-type: none"> • Email alert with location details • SMS-formatted alerts • Support for Skype for Business Notification URI 	Standards Compliance	<ul style="list-style-type: none"> • NENA i2 (08-001) • RFC: SIP 2543, 3261, 2976, 3265, 3262, 3325, 4119, 5139 • RFC: RTSP 2326, RTP 1889, SOAP 3902, PIDF-LO 5139 • TLS 1.2
Security Desk Call Monitoring	<ul style="list-style-type: none"> • Conference security personnel for real-time call monitoring • Security phone number configurable per location • Configurable one-way or two-way audio • Support for Skype for Business Security Desk URI 	Support	<ul style="list-style-type: none"> • Customer support and troubleshooting included with the service • 24/7/365 emergency number • Email and web support portal
Location Manager	<ul style="list-style-type: none"> • Optional capability • Compatible with most softphones • Location Manager Client: Windows 10, Windows 7, MacOS • Off-site tracking with real-time validation, remembers previous locations • On-site tracking with automated location updates and Emergency Response Location (ERL) network maps (subnets, wireless) 	Solution Applicability	<ul style="list-style-type: none"> • Enterprises • Small and medium businesses • Government agencies and educational institutions • VoIP Service Providers • Unified Communication as a Service (UCaaS) providers • SIP Trunk Providers
Dynamic Routing	<ul style="list-style-type: none"> • Dynamic routing of 911 calls based on caller location information provided with the SIP call • Configurable ERL network maps (subnets) 		

About Intrado

Intrado, formerly West, is an innovative, cloud-based, global technology partner to clients around the world. Intrado Life & Safety connects people and organizations at the right time and in the right ways to the nearest emergency assistance, and provides thousands of public safety agencies and first responders with critical data points to coordinate the best emergency response. Our end-to-end 911 solutions help enterprises keep their users safe and meet 911 regulations.

For more information, please call 1-877-862-2835,
email safety@intrado.com, or visit www.intrado.com/life-safety

