

## Project Benefits:

- Automated E911 ALI Data Transport
- ALI Data Lifecycle Traceability
- Web User Interface

## Project Characteristics:

**Industry:** Communications

**Duration:** 2 months

**Project Staff:** 2

## Environment:

### **Business Domains:**

- Local Service Providers
- E911 Compliance

### **Functional Domains:**

- NENA 2 File Generation
- NENA 2 Error Correction
- MSAG Validation

### **Technologies/Systems:**

- J2EE
- JBoss Server
- Oracle Database
- PPP Protocol
- Kermit

## E911 Data Transport & Management

### Summary

Wazee Group is assisting a telephony services provider to increase productivity and decrease costs while meeting federal and state regulations within their local services business unit. Wazee Group has developed an automated system for validating, formatting, transporting, and reporting critical information required by the 911 emergency telephone number system.

### Problem Specifics

The 911 system in the United States works primarily in the following way:

- the three digit emergency number 9-1-1 is dialed
- the call is answered by an agent at a Public Safety Answering Point (PSAP)
- the agent at the PSAP receives the emergency information from the caller
- the agent dispatches the appropriate agency (police, fire EMS) to the emergency

One of the key features of the 911 system is the automatic display at the PSAP of the caller's telephone number, the location of the telephone and supplementary emergency services data. To ensure that the PSAPs have access to accurate information, the Local Service Providers must provide up-to-date Automatic Location Identification (ALI) data to the 911 Service Provider.

When the ALI data is created, modified, or deleted within the Local Service Provider's systems, it must be sent to the 911 Service Provider. The ALI information is validated against the Master Street Address Guide (MSAG) which contains every valid address within a jurisdictional boundary (i.e. city, county, township, etc ...). After validation, the ALI data is sent electronically to the 911 Service Provider. If there are any problems with the ALI data, the errors are returned electronically to the Local Service Provider. The errors in the ALI data must be corrected and resent to the 911 Service Provider.

### Solution Delivered

Wazee Group has developed a system that transports and manages the ALI information. It automates the following activities:

- Extraction of the ALI data from the billing system.
- Validation against the MSAG databases for three different 911 Service Providers.
- File generation in the NENA 2 format and transport to the three 911 Service Providers.
- Error file retrieval from the three 911 Service Providers.
- Error file parsing and insertion into the ALI database.

The system also incorporates a web application for viewing the error messages, editing the records in error, and submitting the records for retransmission.

### Benefits Achieved

The system eliminates the dependency on human involvement in the transfer of data by automating the previously manual steps. It greatly reduces the ongoing costs of transferring the information while maintaining a complete history of the data's lifecycle through the process.

**For more information or account references, please contact Jim Ladd via email: [jladd@wazeegroup.com](mailto:jladd@wazeegroup.com)**

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