

AirOne Solutions Group, LLC

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Specializing in Tomorrow's Challenges Today



AirOneSG VoIP Positioning Center (VPC) Services

AirOneSG (AOSG) VPC is a cloud-based E911 and NG911 Carrier Call Routing Service that routes your emergency calls from any call server/MLTS to the proper PSAP/ECC with detailed location routing.

- Routes 911/NG911 calls to the proper PSAP/ECC in the USA including Alaska and Hawaii, Canada, Puerto Rico and the US Virgin Islands
- 24x7 Emergency Call Center with live 911 operators to provide backup services
- Standard Address Routing, Coordinates Routing, Dynamic Location Routing
- Provides Notifications when 911 is called

Solutions for Enterprise of all sizes

As more and more enterprises are collapsing and consolidating their trunks, or moving to new SIP trunk providers, 911 call remediation becomes more of a concern. In some cases, the local exchange carrier just got out of the PS-ALI service business all-together leaving their customers scrambling for a solution.

AOSG VPC makes affordable E911 call routing solutions available to enterprise organizations of all sizes helping them comply with state and federal regulations. From single site locations to multiple locations and home-based workers. AOSG VPC is a fully cloud-based service with no hardware requirements or other capital expenditure or annual maintenance contracts. There is a one-time service provisioning expense and a low monthly recurring fee based on the number of provisioned locations in the database.

AOSG implementation specialists will assist in helping you gather your PS-ALI data to be uploaded into the service.

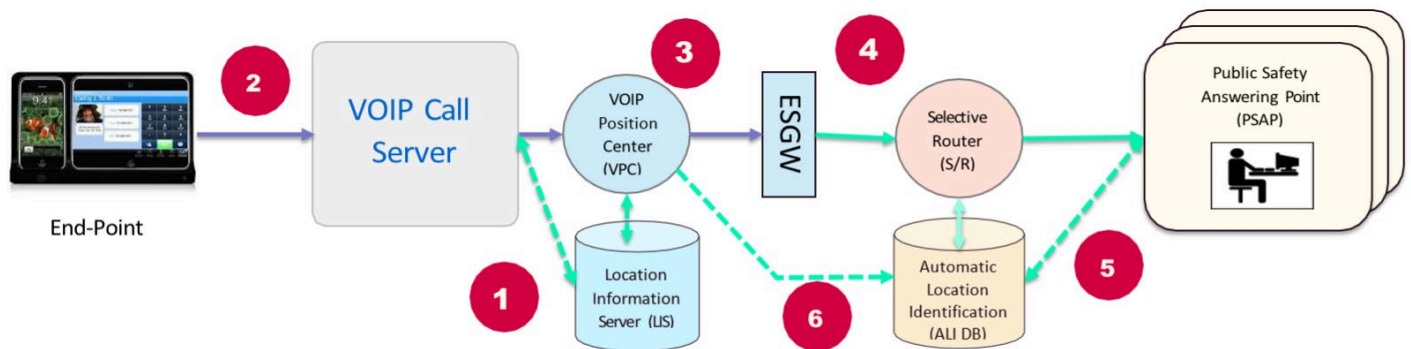
All records are then validated against the Master Street Address Guide (MSAG), properly geocoded and immediately available to route your emergency calls and provide emergency dispatchers the proper details required to send help to where it's needed.



Underlying Architecture

AOSG VPC is powered by our operating agreements with the leading Tier 1 providers of E9-1-1 and NG9-1-1 call routing services. These Tier 1 service providers are provisioned with multiple and highly redundant data centers in the United States. These services connect with over 750 Regional Emergency Services Networks and dozens of NG9-1-1 ESInet's providing call delivery to over 6000 9-1-1 Call Centers in the United States. For Canada, we are connected to an authorized Canadian ECC which then will forward calls to virtually all ECC's in Canada. Support is also provided for Puerto Rico and the US Virgin Islands.

AirOneSG VoIP Positioning Center (VPC)



1. AOSG Pro Services provisions TN, customer name, and civic address to the AOSG VPC LIS database. The address is validated, geocoded and PSAP is selected for proper call termination for this geocoded address.

2. Caller dials 9-1-1, the call server/MLTS routes the call to AOSG VPC via SIP or PSTN. The calling line ID of the provisioned TN is presented as either Caller ID in PSTN or in the SIP INVITE.

3. AOSG VPC receives the call and looks up the routing information based on the TN. The correct ESGW (Emergency Services Gateway) is identified and the call is converted from VOIP to legacy TDM. Also, the VPC changes the TN of the calling party to a temporary ESQK (Emergency Services Query Key) that is associated with the PSAP/ECC. It is this "10-digit telephone number key", also known as a "pseudo ANI" (pANI) that is used both to steer the call to the destination PSAP/ECC and used to allow them to request the correct location details from AOSG VPC.

4. The Selective Router receives the TDM 9-1-1 call and observes the Calling_Party_Number which contains the ESQK in the SIP INVITE. The SR looks up the destination PSAP/ECC based on the ESQK and routes the TDM 9-1-1 call onto the correct trunk to the destination PSAP/ECC.

5. The PSAP/ECC receives the TDM 9-1-1 call and observes the call is identified by the ESQK and requests the subscribers full ID data including Call Back Number, Customer Name and Civic Address from the Automatic Location Identification (ALI) database. The ALI database observes the request is for an ESQK which is "special". The ALI knows to query AOSG's VPC/LIS for the needed data using the ESQK as an identifier.

6. AOSG VPC receives the request for data which is identified by the ESQK and maps the request to the original TN that was in the original Calling_Party_Number. Based on this original TN, the VPC fetches from its LIS database the Customer Name, Civic Address (in MSAG format) and Call Back Number (usually the same TN) and returns that data to the ALI database which in turn provides it to the PSAP for display.

AirOneSG Professional Services

AirOneSG Professional Services offer a wide variety of services to help the enterprise customer plan, implement and manage their E911 needs. Services include Project Management, Installation Services, Training, Audit Services and more.

Call Server/MLTS Support

All call server/MLTS and cloud-based solutions are supported. Call servers and MLTS simply need to be programmed to route all 911 calls to AOSG VPC for proper routing to the PSAP/ECC.