

Case Study

LARGE COUNTY GOVERNMENT

Fairfax County, Virginia

THE CHALLENGE

Provide county-wide automated E911 and emergency notification to protect 13,000 employees across 107 locations

Fairfax County, Virginia, is a large, diverse part of the Washington, D.C. metropolitan area, with more than 1.1 million residents and 580,000 jobs spread over 395 square miles. The County Government has a 2012 budget of \$6.1 billion, larger than the budgets of four states.

Prior to 2007, Fairfax County had no county-wide voice network. Seventy percent of the County's 13,000 workers were located on one of two campuses, yet very little networking infrastructure connected the two. In 2005, the County put out an RFP to replace their outdated, stand-alone assemblage of 138 PBXs and Key systems.

Fairfax County's Technology Infrastructure Division – a branch within the Department of Information Technology – saw implementation of the new county-wide voice network as the opportunity to implement E911 and improve the speed and accuracy of emergency response. The RFP called for the winning solution to provide 'enhanced employee location' based on the physical location information of all phones on the network.

A tragic accident underscored for the County the importance of ensuring fast emergency response when an elevator suddenly shifted and an employee became trapped between the car and the elevator shaft. Emergency responders could not have saved the victim in this instance. However, the County was determined to improve upon the default methodology that directed assistance to the address of the PBX, rather than to the address of the accident which was across the street.

"RedSky's E911 Manager® has been an invaluable tool for providing accurate emergency location information for 9-1-1 calls placed by County employees working in County buildings."

Jerome Craig | Senior Telecom Engineer, Fairfax County

THE SOLUTION

A single E911 application certified to work with Avaya Communication Manager that delivers a fully automated, county-wide E911 solution

As part of its Voice Modernization Project, Fairfax County selected RedSky's E911 Manager® to meet the organization's E911 needs for both its capabilities and its 'Avaya Compliant' rating achieved through the Avaya DevConnect program.

Avaya's winning bid was built around Avaya Communication Manager and featured two Avaya 8720 enterprise switches, with the majority of gateways located in either the Government Center or Massey campus that connected almost all County workers to a common network with common dialing, multiple redundancies and failover protection through Emergency Survivable Sites (ESS). Ultimately, the County network will encompass 16,000 endpoints in approximately 107 locations.

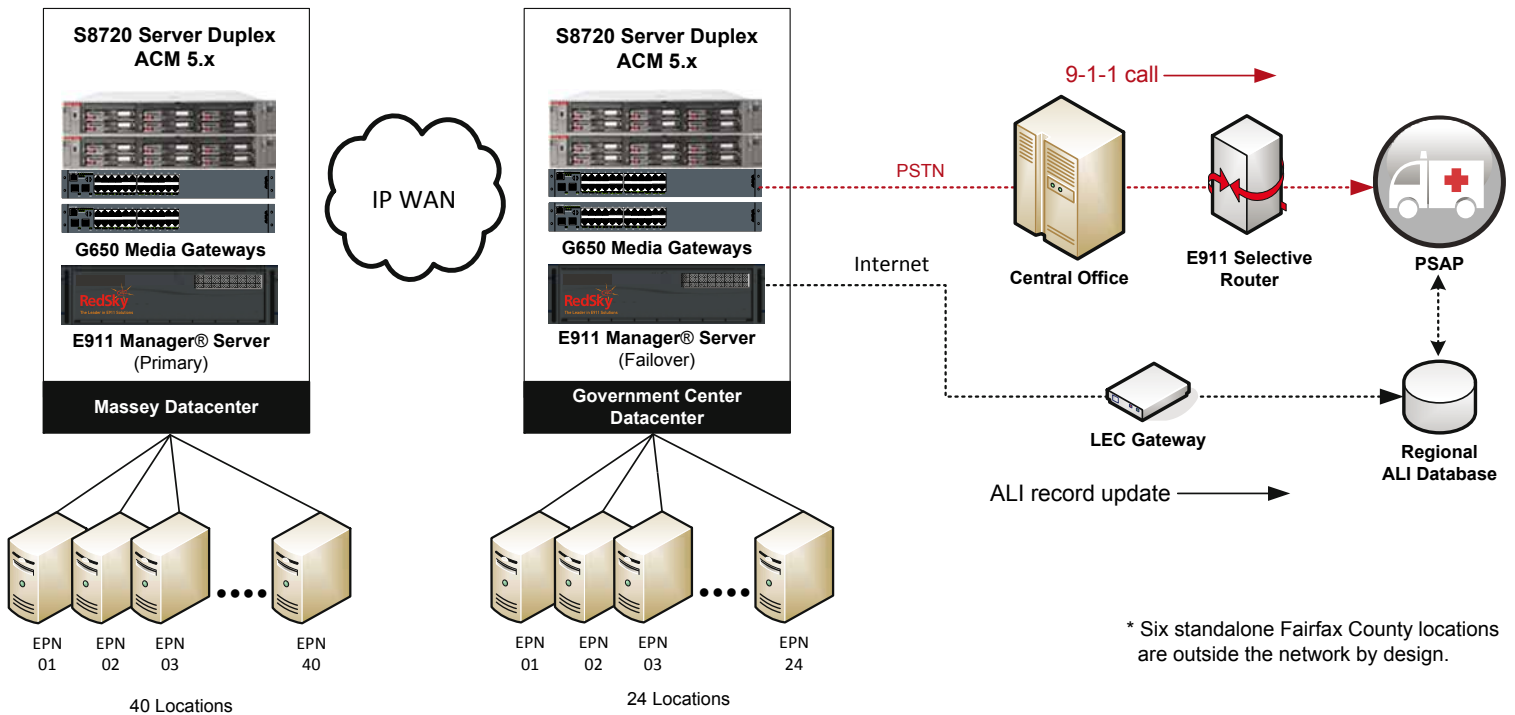
A single instance of E911 Manager® currently protects all County employees across the network and provides centralized management of E911 across the entire enterprise. Leveraging the building name, room and floor location information stored in the Avaya station screens, E911 Manager® automatically reads this information and updates the location record (ALI) for each phone so administrators only have to record moves, adds and changes in one place, saving time and labor costs.

Future plans call for Fairfax County to add a back-up E911 Manager® server at their Continuity of Operations failover site for full redundancy.

Avaya Communication Manager 5.x

Total endpoints – 16,000

Total locations – 107



* Six standalone Fairfax County locations are outside the network by design.

THE IMPACT

With E911 Manager®, Fairfax County has a fully automated E911 solution that supports its stated core purpose: “To protect and enrich the quality of life for the people, neighborhoods, and diverse communities of Fairfax County.” Also driving E911 implementation was their stated belief that protecting employees is equally important as protecting their community.

In practical terms, the County was committed to complying with the Fair Labor Act to provide a safe place of employment for all employees. Also, from a cost savings standpoint, the County moves an average of two to three percent of their phones in a given month. The benefits of a fully automated E911 solution like E911 Manager® in keeping location information up to date without administrative intervention are significant.

The County’s decision to implement E911 was further validated in 2007, when Virginia enacted E911 legislation that requires all PBX/MLTS installed after July 1, 2009 to provide ANI and ALI to the local PSAP for 9-1-1 calls unless alternate methods of notification have been approved.

“For many years the citizens of Fairfax County have had 9-1-1 services at home that provided location-based information in an emergency,” says Jerome Craig, a senior telecom engineer for Fairfax County. “RedSky’s E911 Manager® has been an invaluable tool for providing accurate emergency location information for 9-1-1 calls placed by County employees working in County buildings.”

For more information on RedSky’s software or services for government entities, visit our website at www.redskyE911.com or call us at 877-REDSKY1.