

The Future of U.S. Public Safety

Current Public Safety Systems

Traditionally, public safety has focused on the rapid and accurate delivery of Law Enforcement, Fire and Emergency Medical responses to local incidents via emergency 9-1-1 systems. Local Public Safety Answering Points (PSAPs) have been the backbone of a national system that for the last four decades have provided emergency response services to cities, counties and states.

These systems manage complex workflow which includes five distinct steps:

1. Route and manage incoming calls for service (9-1-1 or 3-1-1, wireless or wired call)
2. Determines the proper responding agencies based on the nature and location of incident
3. Directs the optimal response by first responder resources (police, fire, EMT)
4. Deploys first responders while tracking their activity and safety
5. Records the resolution of the incident for later analysis and possible adjudication

In any comprehensive public safety system, these separate functions are integrated and coordinated to efficiently and successfully respond and resolve incidents. The systems and workflow supporting these functions demand rigorous performance, scalability, reliability, usability and flexibility. Unfortunately many public safety systems in use today do not meet these criteria.

U.S. Public Safety Trends

Much of the emergency response infrastructure is greater than ten years old and in urgent need of modernization. InterAct believes several environmental factors are coalescing to push rapid change in how emergency response services will be deployed over the next five years.

- Unprecedented state and local government budget constraints continue through 2015 causing rapid regional PSAP consolidation
- Compelling cloud computing economics dramatically decrease system cost delivery and on-going maintenance charges
- Next Generation 9-1-1 call taking and records management systems (RMS) applications will drive the regional consolidation build out between agencies
- Public safety solutions merge to form end to end an workflow solutions delivered by a single vendor
- Vendor landscape rapidly consolidates with some companies merging while others go out of business

Critical Challenge

The customers and vendors in public safety have long been “addicted” to the customization of emergency response systems. This has greatly limited system scalability while adding a significant and escalating maintenance costs which have done nothing to improve overall performance and functionality because they limit the ability to upgrade and take advantage of the latest technology. These customizations have also greatly hampered improvements in public safety outcomes by greatly limiting the ability of state and local agencies to easily share critical information – this despite massive investments in public safety systems post 9/11.

There is a better approach based on private sector best practices which can deliver solutions that can be used “out of the box” while providing greater flexibility and extensibility along with unparalleled scalability. The right solution for modern public safety systems should be evaluated based on its ability to provide rapid installations (in weeks not years) with compelling features and functionality that exceed expectations – all at industry leading price points while allowing for attractive and easy upgrade paths thus allowing the constant use of the most modern technology.

Today, the public safety sector faces a number of challenges that are dramatically affecting the traditional client/server application model used by most agencies. New devices, form factors, mobile solutions, data sharing initiatives, social media and Next Generation 9-1-1 systems hold the promise of greatly enhanced effectiveness and responder safety; but come at a prohibitive cost to most agencies. The benefits of these new technologies combined with today’s funding pressures are motivating governments to overcome their past resistance to shared

computing infrastructure in the form of scalable cloud computing and Software as a Service (SaaS) application delivery model.

“Cloud First” Federal Mandate

In 2011, the U.S. Federal Government adopted a “cloud first” policy that requires agencies default to cloud-based solutions whenever a secure and reliable cloud option exists. The National Institute of Standards and Technology (NIST) has issued a three volume Cloud Computing Technology Roadmap and initiated a standards acceleration program so that best practices from the private sector can be used for government systems immediately, without a protracted standards process.

This mandate by the Federal Government indicates that we may have reached the tipping point for cloud computing in the public sector during the past 18 months. Evidence of this are the recent implementations of a statewide multi-tenant RMS SaaS solution by the Indiana State Police and a similar implementation by the Maryland State Police expected to go live early 2013.

Both of these are the largest non-premise-based public safety systems of their kind. This means that local agencies in both states do not need to procure and manage any hardware or software. Agencies that want to adopt this approach simply connect to the state wide implementation and configure their applications. No further work is required; no complex time consuming and expensive software customizations, and maintenance is included as part of monthly subscription fees. This model of application delivery has been available in the private sector for over a decade as evidenced by the worldwide success of the cloud-SaaS based CRM (customer relationship management) solution from Salesforce.com.

Third party analysts also concur; in 2011 60% of public sector participants in an International Data Corporate (IDC) Enterprise Panel indicated they are likely to pursue the cloud model for core business applications. This represents a major shift from the reticence expressed in a similar panel three years prior. As public agencies learn that they can save 50%-90% of life-cycle costs with cloud applications, there will be a massive migration from legacy premise-based client/server systems to shared multi-tenant cloud-based solutions.

Beginning in 2012 and peaking in 2015 there will be a major displacement of legacy client-server public safety systems as agencies consolidate and adopt scalable cloud solutions. The public safety vendor base is largely not well positioned to adapt quickly to this major shift in technology putting agencies with legacy systems at risk.

Getting The Public Safety Cloud Right

InterAct has invested considerable time and resources to develop the most innovative, cost effective technology for the public safety agencies and the communities they serve. Simply promoting the increased use of new technology is not our goal and we recognize that innovation without careful planning does not best serve our customers.

We are dedicated to empowering public safety agencies to leverage technology that enables more efficient workflows, fosters greater team engagement, enhances interoperability and data sharing across agencies, and increases officer and public safety.

What is The Public Safety Cloud?

- A secure CJIS compliant platform for storing and accessing public safety data
- Applications are available anytime, anywhere from a variety of Internet connected devices
- Inherently mobile solution that allows public safety personnel to stay connected to a fully extended public safety network
- Cost effective alternative that can dramatically lower the Total Cost of Ownership (TCO) to help agencies meet the challenge of today’s tight public safety budgets
- A new and innovative method to better connect public safety professionals with the community they serve to improve overall effectiveness and facilitate the exchange of valuable information

Customers use the same applications they are familiar with delivered in a different format. Same as a premise based solution, users employ tools within the applications to initiate, track, report and close emergency responses.

However, instead of being installed and maintained by the agency, these tools are accessed through InterAct's Public Safety cloud anytime, anywhere from a variety of Internet connected devices.

Why Move to The Cloud?

- **Unsurpassed Agency Collaboration, Data Sharing, and Interoperability**

For most agencies the most important attributes of InterAct's Public Safety Cloud are the robust internal and external collaboration features. Our solution permits agencies of all sizes to share data seamlessly with officers inside and outside of their jurisdictions, work shifts and even time zones. Agencies are able to optimize the flow of information that strengthens tactical decisions in emergency response situations

- **Budget Sensitive Technology**

InterAct's Public Safety Cloud allow agencies to "pay-as-they-go", paying only for the capacity they need. New users can also be added easily with no degradation in system performance. By leveraging the economies of scale of InterAct's CJIS compliant data center operations, agencies are able to take advantage of a highly cost effective and scalable solution without compromising features or performance.

- **Minimal Infrastructure Requirements**

InterAct's Public Safety Cloud platform minimizes the infrastructure requirements. Typically all that is required are workstations with an Internet connection – everything else – servers, data storage, networking, operating systems, databases, management tools are all included as part of the service. InterAct is responsible for all administrative maintenance, updates, patches and security. This drives IT-related costs down considerably.

- **Future Proof Applications and Worry Free Upgrades**

New feature releases and upgrades are seamlessly and automatically executed inside the InterAct Public Safety Cloud environment with virtually no effort required on the part of each agency. This means that agencies using our cloud-based applications are able to serve and protect their communities with the most up-to-date technology available. No more concerns about planning for expensive and time-consuming application upgrades.

- **Anytime, Anywhere Information Access**

The ability to access applications from virtually any Internet connected device allows public safety personnel to work effectively anywhere, whether at their agency, on patrol, at home, or at another geographical location, all while retaining the same level of access to their systems and data. This greatly increases both efficiency and overall productivity of agency personnel.

- **Enterprise Grade Technology and Security**

InterAct's investment in a state of the art data center platform gives agencies of any size a highly scalable solution they don't have to build and maintain themselves. The InterAct data center is staffed 24x7x365 with a team of technology professionals that are experts in all aspects of data center operations. InterAct's data center incorporates the latest advanced security capabilities and operates in 100% compliance with CJIS Security policy. All platform administration is performed by InterAct including software updates, security patches, and data backups.

- **Rapid Deployment**

InterAct's Public Safety Cloud is already in place and fully operational today. New agencies are easily brought on board without requiring time consuming hardware and software implementations and extensive user training. This has translated to substantially accelerated deployment times with some agencies coming online and fully operational in weeks instead of months or even years as is often experienced with traditional on premise solutions.

Current InterAct Cloud Implementations:

InterAct has successfully implemented multiple, large-scale public safety cloud projects that are currently delivering value to the agencies and the people they serve. Some examples include:

Indiana Public Safety Commission and Indiana State Police:

InterAct has implemented with the Indiana State Police, Indiana Department of Homeland Security and Integrated Public Safety Commission a complete emergency response workflow solution utilizing the InterAct Public Safety Cloud which includes CAD (computer aided dispatch), Maps, mobile applications and online RMS. Each component of this solution is state of the art based on modern web programming technology that has been utilized extensively in the private sector for well over a decade. The project is a statewide initiative to improve data sharing and interoperability among Indiana agencies and currently includes 16 counties and over 35 agencies in addition to the State Police.

Texas Parks and Wildlife (TPWD):

Texas Parks and Wildlife deployed InterAct Online RMS to strengthen border security by providing real-time data-sharing capabilities anywhere and anytime from most Internet connected devices. Implemented 2011 the system provides wardens the ability to efficiently collect, evaluate, organize, analyze and share reliable incident data to improve their field effectiveness, improve officer safety and support their participation in Operation Border Star (a joint effort involving the U.S. Border Patrol, Coast Guard, the Texas Department of Public Safety and other federal, state and local law enforcement authorities). Instead of using a pen and paper system, now all 532 wardens across 10 regions (268,820 square miles) have access to information instantly anywhere, anytime using InterAct Online RMS and soon to be deployed InterAct PocketCop Smartphone application. Additionally wardens can seamlessly access information from over 100 local Texas agencies using InterAct RMS Online and agencies submitting data to the Texas Law Enforcement Analysis Portal (LEAP), a statewide data-sharing initiative.

Maryland State Police:

Similar to the Indiana State Police (ISP) implementation, Maryland State Police are completing development of a new emergency response workflow solution. Maryland State Police will also utilize the InterAct Public Safety Cloud including CAD (computer aided dispatch), Maps, mobile applications and online RMS. Each component of the solution is state of the art based on modern web programming technology utilized extensively in the private sector for well over a decade. When the system “cut’s live” in early 2013 MSP will begin roll out of statewide data sharing and interoperability initiative initially supporting over 3,500 sworn officers – currently Montgomery County PD, Baltimore DP, Harford County Consortium, Montgomery County Park Police and Annapolis have already started data sharing efforts . The State of Maryland Statewide contract (managed by Maryland DoIT) will encourage agencies to subscribe to this new public safety solution rather than continuing to manage and maintain their own public safety infrastructure. Agencies that join will not lose control of their data and will have configuration options available to support their specific needs.

Oklahoma County Sheriff’s Office:

Oklahoma County addressed the growing problem of inter-state drug trafficking along Interstate I-40 corridor by implementing a multi-agency information sharing network based on InterAct’s InterDex™ platform and smartphone applications InterAct MobileCop and PocketCop. Starting out as a single agency implementation, to date the network has grown to over 120 federal, state, county and local law enforcement agencies in Oklahoma and Arkansas including Oklahoma Highway Patrol, Tulsa County, Oklahoma Fusion Center and the Oklahoma District Attorney Office. These agencies have joined together to create an interstate information sharing network based known as the “I-40 Corridor Law Enforcement Information Sharing” (CLEIS) network. This system provides more than 2600 officers with real-time access to information gathered across multiple jurisdictions improving officer safety and producing better public safety outcomes. In 2011 CLEIS initiative received an “Excellence in Technology” award from the International Association of Chiefs of Police (IACP) for *Excellence in Law Enforcement Communications & Interoperability*.