

The Status of "9-1-1" Apps

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Overview

- Background
 - AppComm
 - ❖ APCO's Key Attributes
- ***** "9-1-1" Apps
- **❖** Next steps



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APCO's Key Attributes (KA)

- Some apps are not safe or effective
 - Misleading claims such as "Better than 9-1-1."
 - Interference with emergency operations
- APCO created a list of <u>Key Attributes of Effective Apps for Public Safety and Emergency Response</u> to guide the selection of apps on AppComm. Examples:
 - **Operability** (efficient use of data, minimal battery strain)
 - Security
 - Communication with 9-1-1, sending data to PSAPs and Comm Centers, and interfacing with PSAPS



Mobile Apps & 9-1-1

- In 2015, APCO published a Fact Sheet and White Paper on Mobile Apps and 9-1-1
- Intended to educate the public and stakeholders in the app development community on the state of the 9-1-1 system and the role that mobile apps can play currently and in the future
- Shared early lessons learned from app efficiency and security testing pilots



Misleading Claims

- The app can pinpoint user locations.
- The app is certified.
- Communicate directly with first responders.
- Better than 9-1-1

- (Often contradicted by the Terms of Service)
 - "not a replacement for 9-1-1"
 - "do not rely on the [app]"



Technical Issues

- The 9-1-1 network is secure, reliable, and trusted. Apps must be as well.
- "9-1-1" apps run over the Internet and require heightened developer support.
- Today, there is no standard to ensure safety, nationwide use, competition, interoperability, etc.

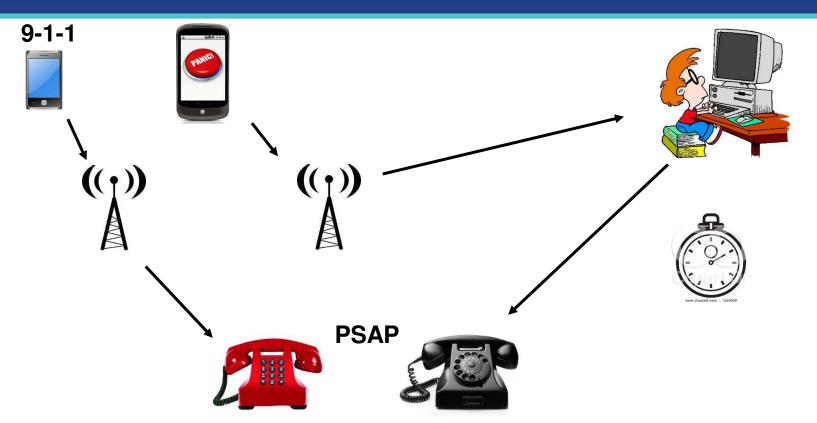








"24/7" Monitoring Center





What Developers Need to Know

- Contributing to an emergency response requires specialized knowledge & training
- 9-1-1 sets a high bar for user expectations
 - Free
 - Reliable
 - Universal
- Liability exposure



What PSAPs Need to Know

- Without a common interface:
 - Monitoring challenge
 - Training for diverse and unexpected features/formats
 - No interoperability
- Pricing issues
 - Risks of adopting a proprietary solution the public comes to rely on
- Security issues



APCO's Vision for a 9-1-1 App (1)

- Comply with industry standards
- Work anywhere in the country
- Be as reliable as the existing 9-1-1 system
- Preserve the familiar simplicity of 9-1-1
- Connect users to the appropriate PSAP
- Comply with FCC rules, state/local regs, and industry best practices



APCO's Vision for a 9-1-1 App (2)

- Work without delay, regardless of device or app software updates
- Be free to the public and not impose unreasonable costs on PSAPs
- Be device and OS agnostic
- Meet public safety's cybersecurity needs
- Efficiently use/monitor device battery and throttle-down if necessary

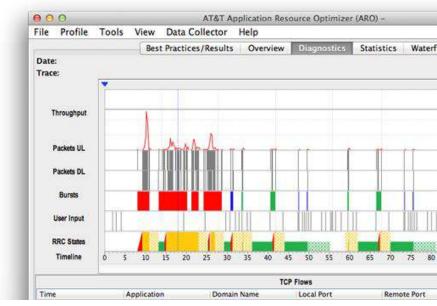


Taking a step back...



Making Apps More Efficient

- Collaboration with CTIA the Wireless Association, AT&T, and developers through AppComm
- Testing with AT&T's Application Resource Optimizer (ARO) for file compression, unnecessary connections, duplicative files/downloads, etc.





Making Apps More Efficient

The Results:

- App 1 meeting best practices;
 adopted for routine development
- App 2 opportunity for file compression to speed data transfer and reduce battery/data use







Refining an App Testing Platform

- App testing platforms can flag security vulnerabilities:
 - Excessive Permissions
 - Locations of IPs accessed
 - Sensitive Data Exposure
- Adapting a program used by federal agencies for public safety and exploring issues such as:
 - Data interoperability between agencies (standard reporting)
 - Meet security requirements (HIPAA, CJIS)
 - Comply with federal, state, & local laws, regulations, & policies



Thank you!

- AppComm: <u>www.appcomm.org</u>
- APCO website: <u>www.apcointl.org</u>
- Twitter: @GRO_APCO

Fact Sheet and White Paper on Mobile Apps and 9-1-1:

http://psc.apcointl.org/2015/04/27/apco-releases-fact-sheet-and-white-paper-on-mobile-apps-and-9-1-1/