



NG9-1-1 Call handling using PC³ (Persistent Contextual Collaborative Conferencing)

Mark J. Fletcher, ENP
Product Line Manager – Public Safety Solutions

8th July 2011



Challenges PSAPs Face Today

- ▶ **Inclusion:** Need to handle calls from all citizens, including non-native language speakers, people with disabilities who cannot speak or hear, etc.
- ▶ **Multi-channel:** Voice only, Inability to process multi-media, multi-channel communications (video, text messaging, social media)
- ▶ **Keeping up with Technology:** Vehicle telematics, smartphones with biometric monitoring
- ▶ **Sharing data with other departments:** Disparate intra and inter agency command and control communications systems
- ▶ **Old technology:** Outdated communication systems jeopardize rapid and effective emergency response
- ▶ **High Availability + Redundancy :** Citizens need 24/7 access
- ▶ **Funding:** Diversion of legitimate funding for other objectives not related to the direct chain of care

“In the past 15 years, advancements in modern communications technology have created the need for a more advanced system to access emergency care. While the existing 9-1-1 system has been a success story for more than 30 years, it has been stretched to its limit as technology advances.”

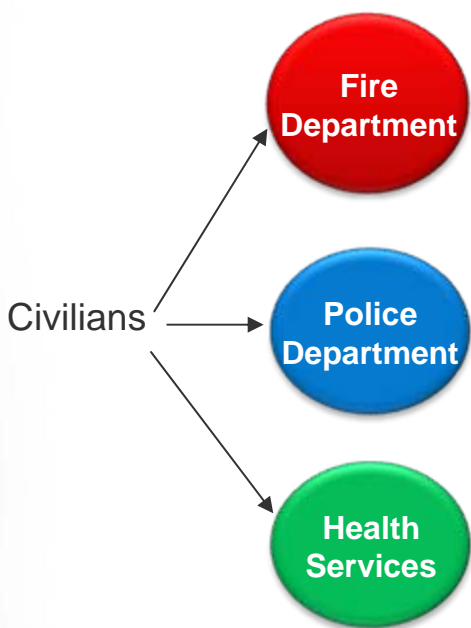
National Emergency Number Association (NENA)



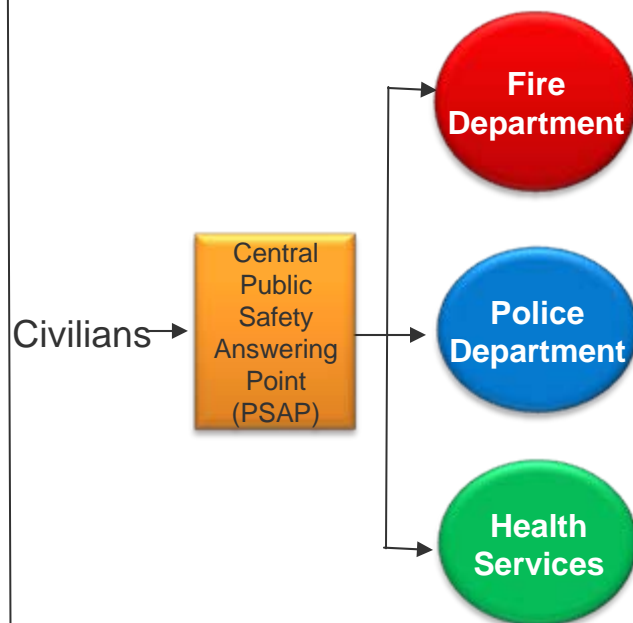
Avaya
Inc. –

Different types of PSAPs deployments require a tailored approach

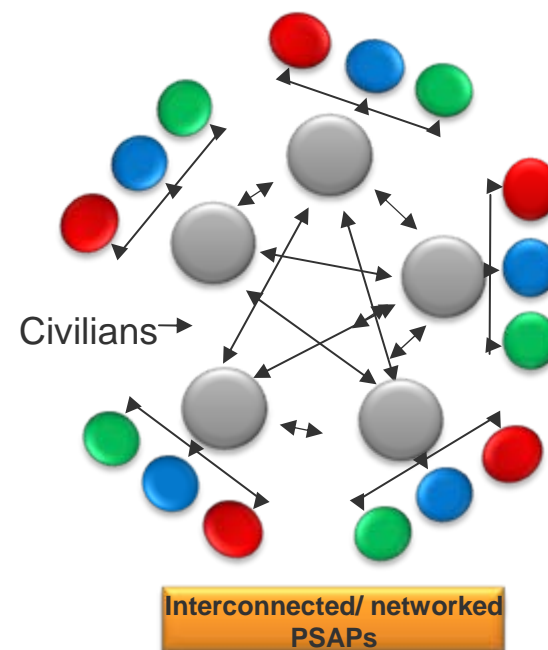
① Decentralized model



② Centralized model



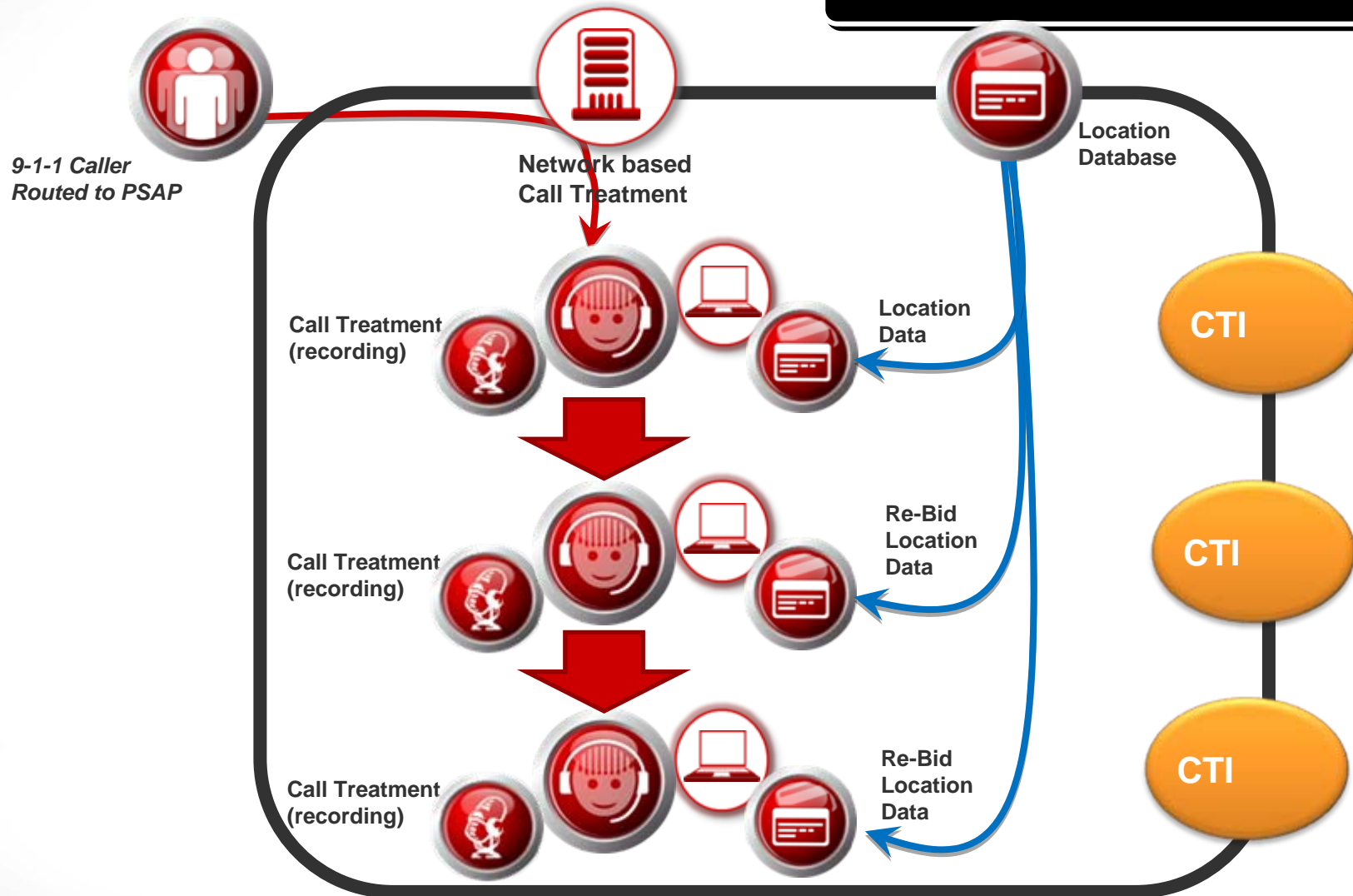
③ Interconnected model



NG9-1-1 must be flexible as localized 'policy' will determine 'topology'

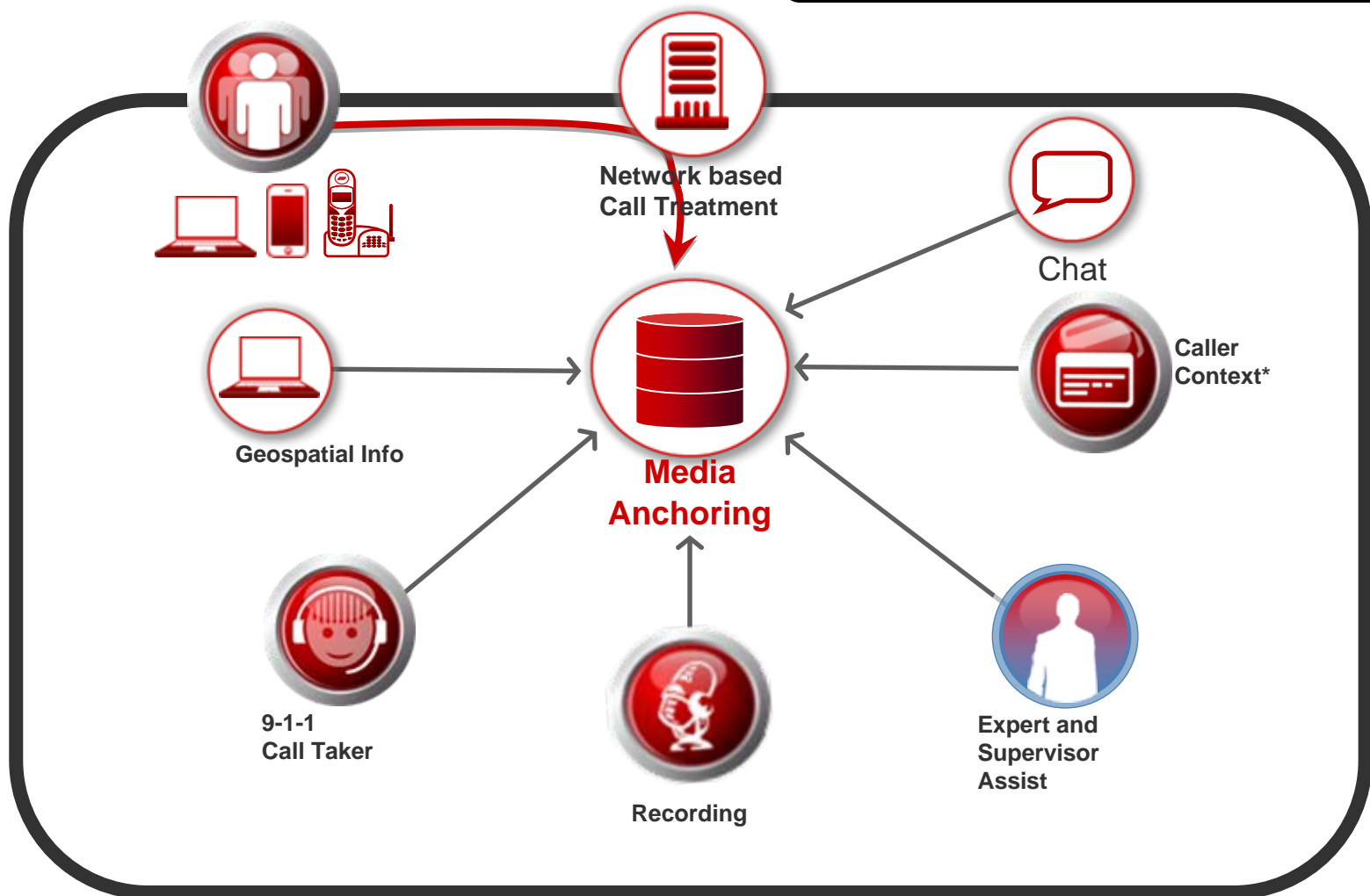
Today's E9-1-1 Routing Model

Capture – Forward – Re-Capture

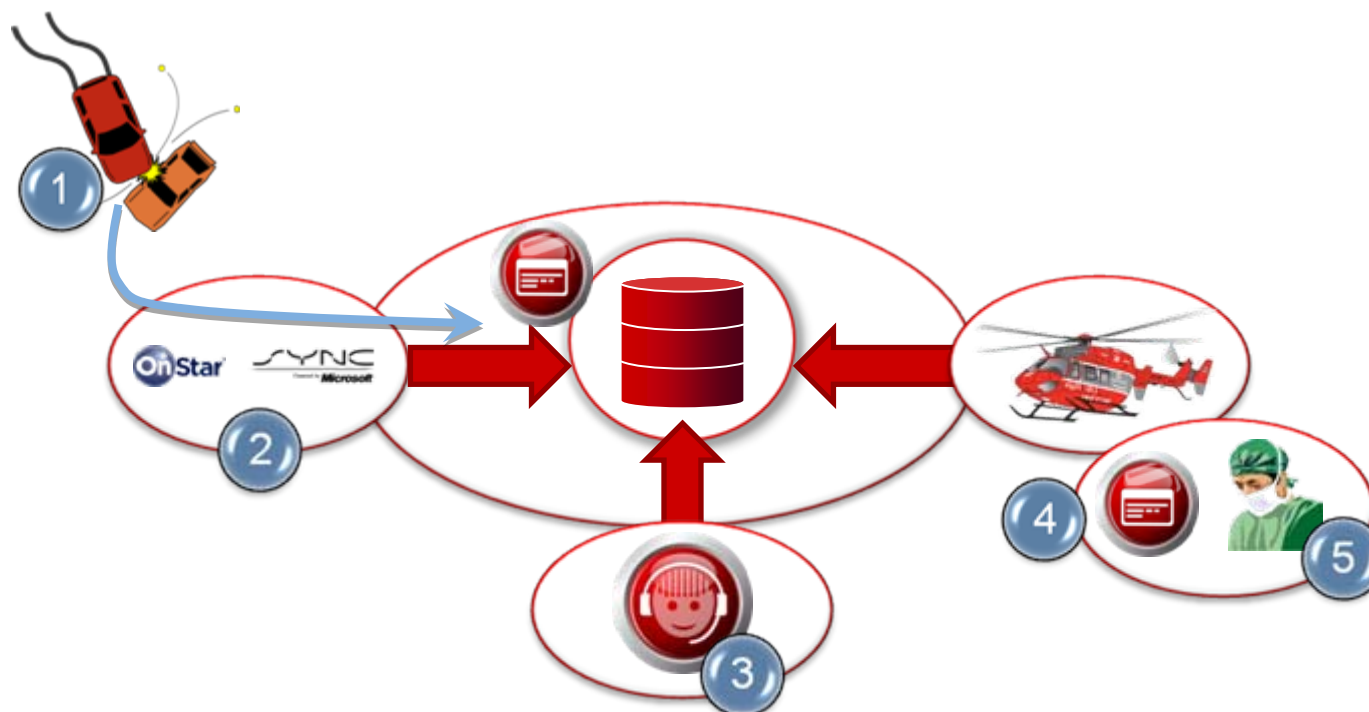


NG9-1-1 PC³ Routing Model

Innovative Collaboration Session

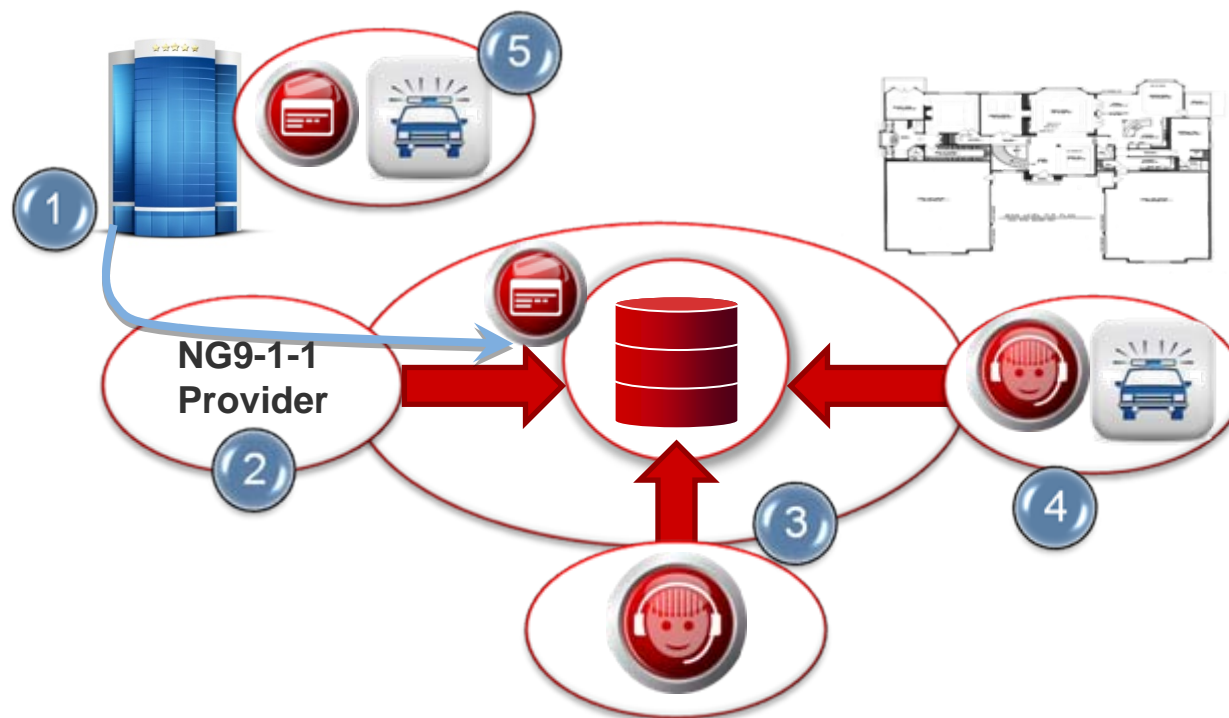


NG9-1-1 PC³ Use Case 1: Automatic Crash Notification



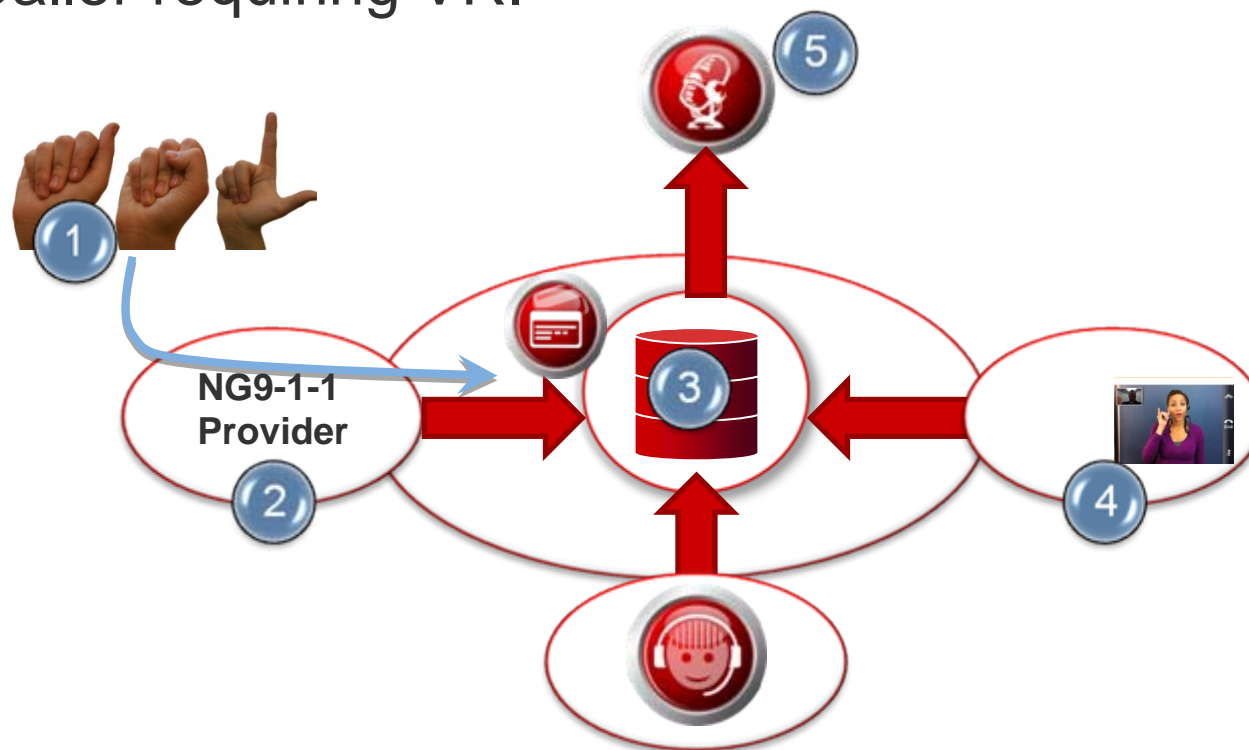
1. Vehicle involved in an accident
2. ACN signals provider with telematics data
3. Provider establishes PC³ with Agency
4. Crash data is analyzed
5. Trauma resources are prepared in advance

NG9-1-1 PC³ Use Case 2: Enterprise Building Floor Plans



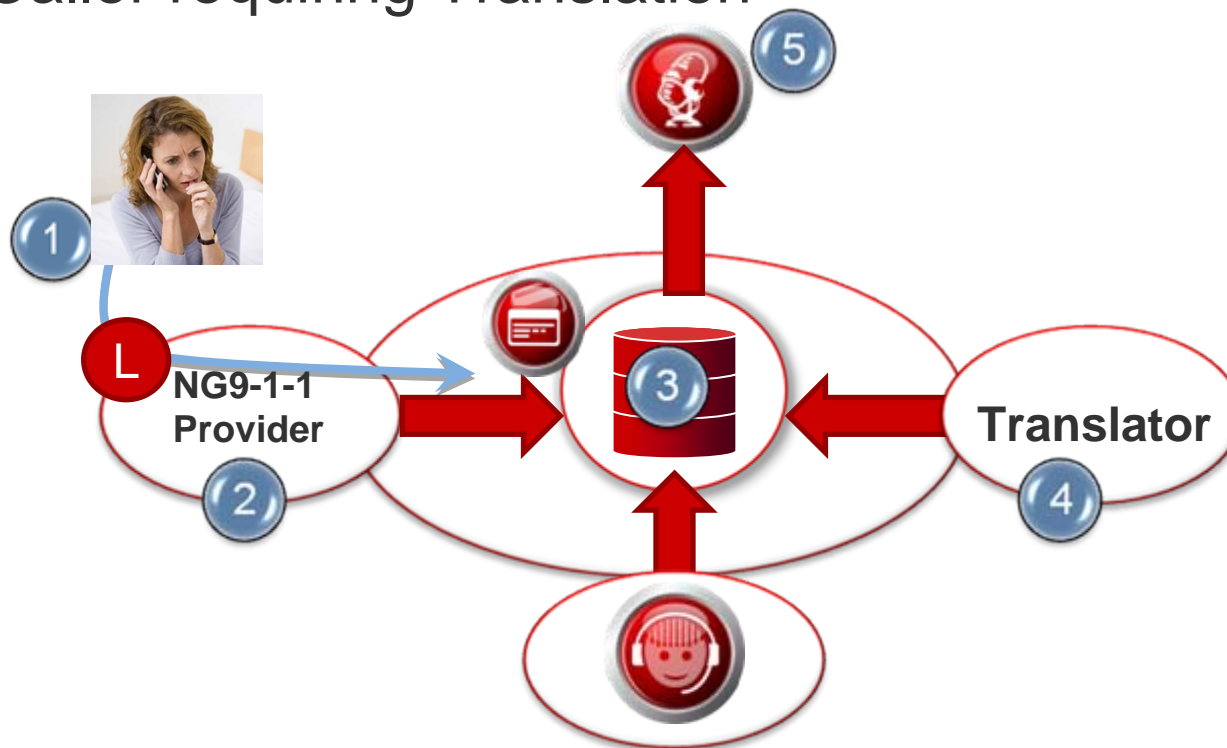
1. Enterprise Emergency Call
2. NG9-1-1 with PIDF-LO providing floor plan URI
3. PSAP establishes PC3 with caller
4. Floor plan is analyzed units dispatched
5. Units arrive on scene with detailed information in-hand

NG9-1-1 PC³ Use Case 3: ASL Caller requiring VRI



1. ASL Video Emergency Call
2. NG9-1-1 with video
3. PSAP establishes PC3 with caller
4. VRS is added to conference
5. Centralized recording captures media from all endpoints

NG9-1-1 PC³ Use Case 4: Voice Caller requiring Translation



1. Voice NG9-1-1 Emergency Call
2. NG9-1-1 with language indicator from device or network (L)
3. PSAP establishes PC3 with caller
4. Translator is added to conference
5. Centralized recording captures media from all endpoints

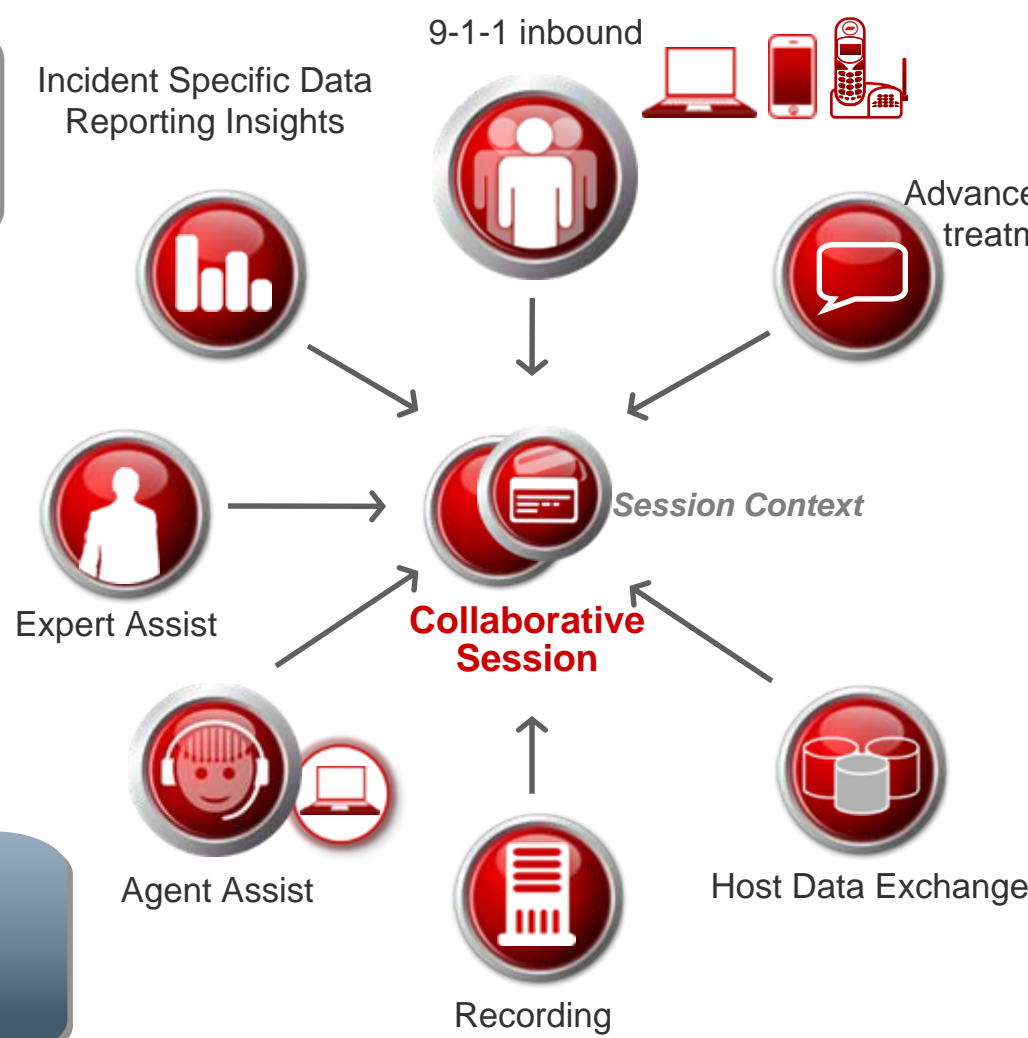
Avaya's Revolutionary way to Collaborate

Persistent Contextual Collaborative Conference

Live and interactive SIP conversations happen throughout contact interaction

Relevant Context delivered to Agent during live interaction

Analytics and Contact Recording feeds caller/incident-specific data to SIP string and activates call recording



Communications Interaction Session stays anchored at a fixed point

Intelligent Communications Routing based on contextual data from the enterprise with external data queries



Solutions > Unified Communications

Public Safety

Share |
 Print |
 Follow |
 Contact

- Overview
- Notification
- Branch Offices
- Mobility
- Office/Campus Roamers
- Office Workers
- Public Safety**
- With Microsoft
- ▶ Specialized Solutions



What are you looking for? +

Avaya Grants Assistance

Get help to identify grant opportunities.

Summary | Features and Benefits | Products | Services

Government organizations and agencies need to continually improve their responses to public safety requests. Many agencies rely on Avaya to help cost-effectively build their next-generation public safety networks. Avaya customers are enhancing response quality and rates by using advanced, secure communications to connect people and information at the right time, in the right place, using the right device. Avaya solutions:

Featured Resources

- BROCHURES**
- Connected to the New Era of Next Generation 9-1-1 Communications
- CASE STUDIES**
- Miami-Dade Fire Rescue Video

<http://www.avaya.com/PublicSafety>



THANK YOU

Mark J. Fletcher, ENP

fletcherm@avaya.com



AVAYA

INTELLIGENT COMMUNICATIONS
