Solution Overview – C4iS

September 2021

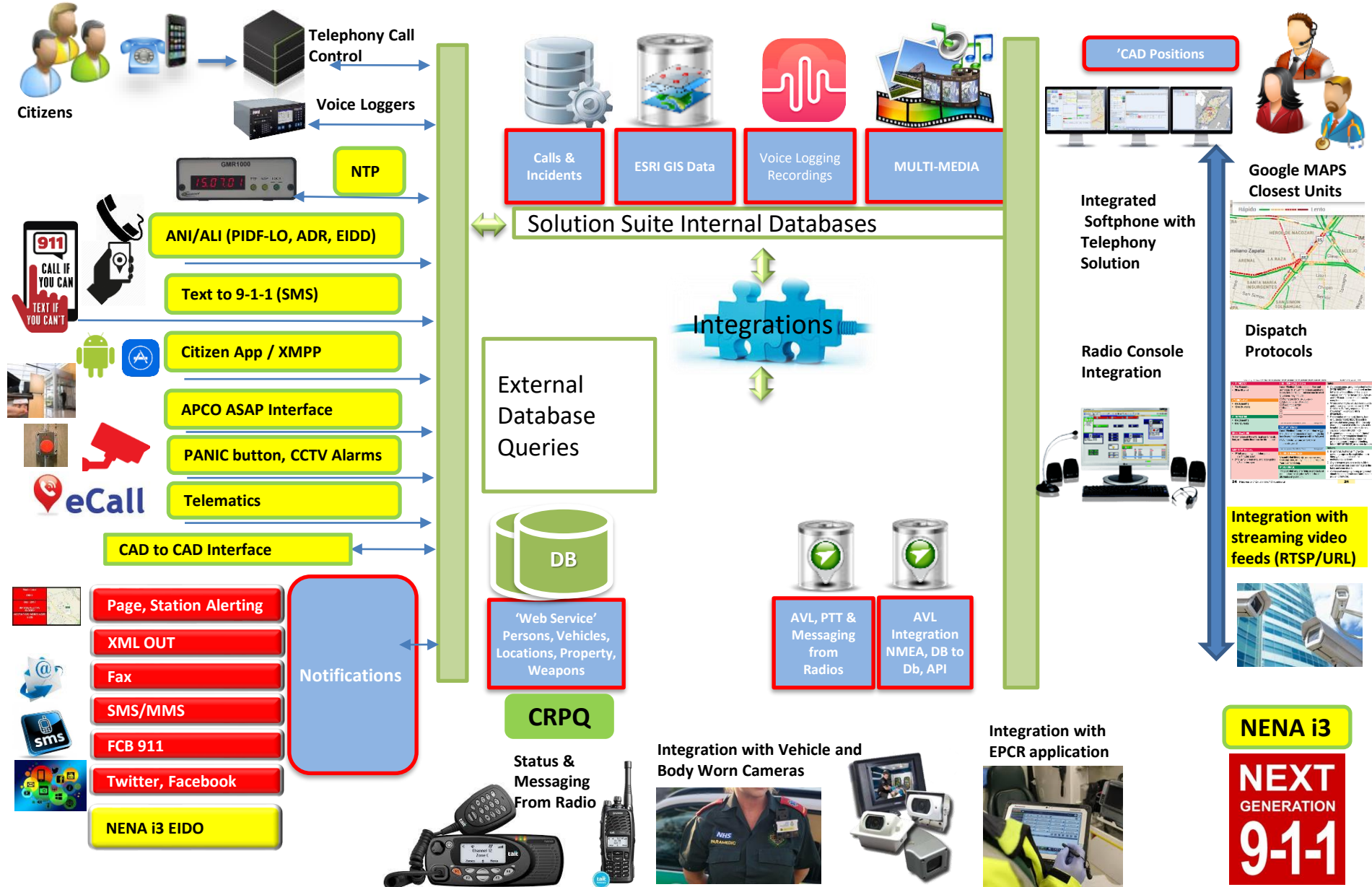# Users

Citizens

Other Agencies

9-1-1 CENTER

DIRECTORS / CRISIS ROOM

CALL TAKERS

AGENCY CALL TAKERS

COORDINATORS, SUPERVISORS

Data Center 1

Data Center 2

RESPONDING AGENCIES

POLICE DISPATCH

FIRE DISPATCH

EMS DISPATCH

Stations
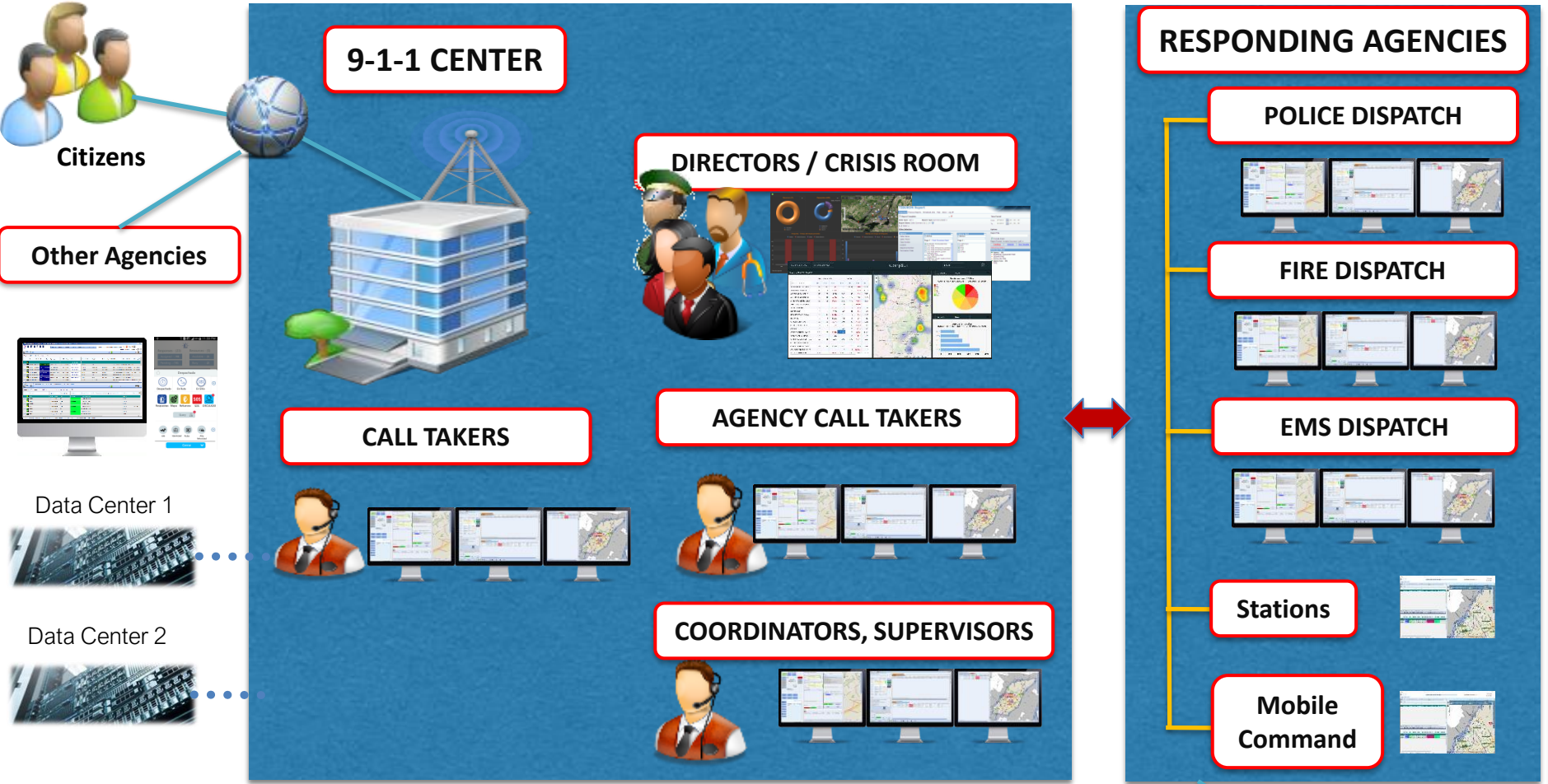
Mobile Command

PATROL SUPERVISORS

RESOURCES

REMOTE VIDEO SURVEILLANCE

Principle Integrations

Citizens

Telephony Call Control

Voice Loggers

NTP

ANI/ALI (PIDF-LO, ADR, EIDD)

Text to 9-1-1 (SMS)

Citizen App / XMPP

APCO ASAP Interface

PANIC button, CCTV Alarms

Telematics

CAD to CAD Interface

Page, Station Alerting

XML OUT

Fax

SMS/MMS

FCB 911

Twitter, Facebook

NENA i3 EIDO

Notifications

Calls & Incidents

ESRI GIS Data

Voice Logging Recordings

MULTI-MEDIA

Solution Suite Internal Databases

External Database Queries

Integrations

DB

'Web Service' Persons, Vehicles, Locations, Property, Weapons

CRPQ

AVL, PTT & Messaging from Radios

AVL Integration NMEA, DB to Db, API

'CAD Positions

Integrated Softphone with Telephony Solution

Radio Console Integration

Google MAPS Closest Units

Dispatch Protocols

Integration with streaming video feeds (RTSP/URL)

NENA i3

NEXT GENERATION 9-1-1

Status & Messaging From Radio

Integration with Vehicle and Body Worn Cameras

Integration with EPCR application

Architecture

Command Centers

Call Taker, Dispatcher, Supervisor positions

Softphone & CAD

Analyst positions

Report

CrimeCube

On Premise Server Processes
GIS DB
Softphone, ALI Gateway
Citizen App

Local Store

DN Connect Remote Bridges
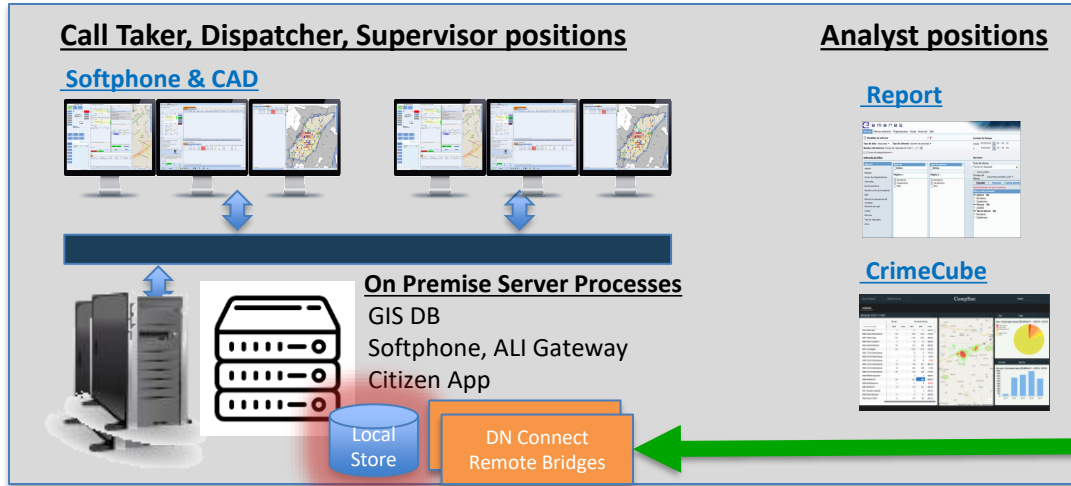
WebMonitor
for Agency stations

WebCAD
for Mobile Command Posts

HTTP

Mobile Responder
for Field Personnel
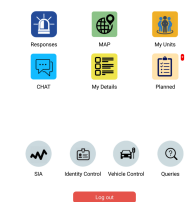
TCP/IP

TCP/IP

Data Center 1

Data Center 2

Server Processes

WebCAD, WebMonitor

Mobile Responder AVL, MDM

GIS

Chat

Report

CrimeCube

Interface Servers MSI DB Queries

DN Connect Main Bridges

DN Connect Main Bridges

DN Connect Servers

DN Connect Servers

CAD
AVL
Multimedia

CAD
AVL
Multimedia

Local Store

Local Store

APP OS APP OS APP OS OS

OS APP OS APP OS APP OS

Virtualization Platform

Virtualization Platform

Database Replication

VMWare HA

VMWare HA

Server Processes

WebCAD, WebMonitor

Mobile Responder AVL, MDM

GIS

Chat

Report

CrimeCube

Interface Servers MSI DB Queries

Integrated Communications

CAMERAS

**REGISTER, RECORD
AUDIT LOGS
CONSOLIDATED REPORTS**

RADIO CONSOLE

Mobile CAD

SAM

PBX

LMR P25

Mobile Radio

Portable Radio

Handheld LTE Devices

**PTT over
Cellular**

Main Applications

Softphone / CAD for Call Takers, Dispatchers and Supervisors

WEBCAD for Stations or other agencies

Mobile CAD on Windows

Web - FieldStats
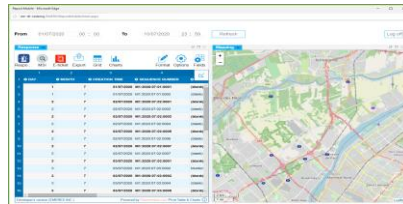
Web - FieldMonitor
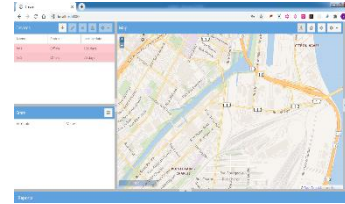
Web - Reports

Mobile CAD on Android
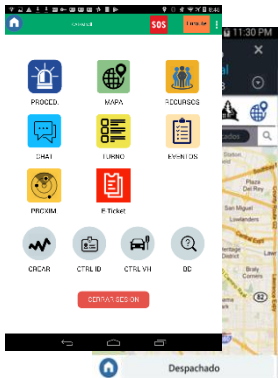
SAM on Windows or Android Tablet

SAM on Smartphone Android
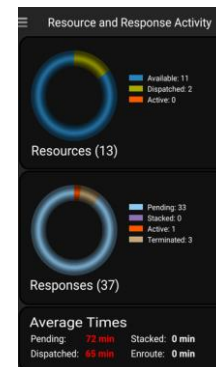
Web – CrimeCube
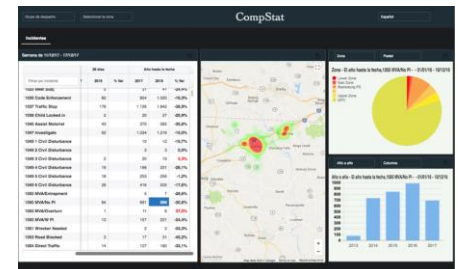
Softphone – CTI Integration

Status Indicator

Longest call in queue

# of call in queue

Logged on user and role

Timers and threshold

Agent status timer window

John Smith (Agent) 00:00:02

911 4000 INTERNAL 2000 911 TXT/PICS Queue Buttons

Feature buttons

SET READY
SET NOT READY
LOG OFF
CALL SUP.
ALERT SUP.
GOOGLE LINK
AUDIO LOG

#4000 BUSY
LCD Panel
(987) 654-3210
(987) 654-3210

Duration : 00:00
Time Waited : 00:12

ALI :
201 HILLSBORO RD,CAMDEN,CA

ALI Panel

RELEASE
HOLD
CALL BACK
REDIAL

Call control buttons

Contact panel

Public Works General Security Red Cross

Lists and tools selection buttons

Lists
Keypad
Contacts
Favorites
Agents
B.L. Callers
V.I.P. Callers
Tools

ACTIVE ABANDON HISTORY

(987) 654-3210 Feb 13, 2020 12:58
(987) 654-3210 00:00:00
#4000

Lists and tools Panel

{NO JURISDICTION SELECTED}

Click to access font and window zoom control

Jurisdiction configuration determine which contacts, transfer buttons, and contact filters are available

Supported (with Cisco):
- Automated ACD Login
- Call Control / Conf. / Transfers
- ANI/ALI
- Contact Lists
- Active Agent View
- Alert Supervisor
- Call Back 123 Caller
- Set Reason for Not Ready
- Timer Alerts / Agent Statistics
- Call History

Optional Features:
- Abandoned Call List
- # of Calls in Queue Display
- Longest Call in Queue Display
- VIP/Black-Listed Callers

Softphone - Voice Recorder Integration

Call Takers can access a conversation recording via the Call History Tab.

Supervisors and QA personnel can access a conversation recording for a call associated to a Response from Query Tool module in CAD.
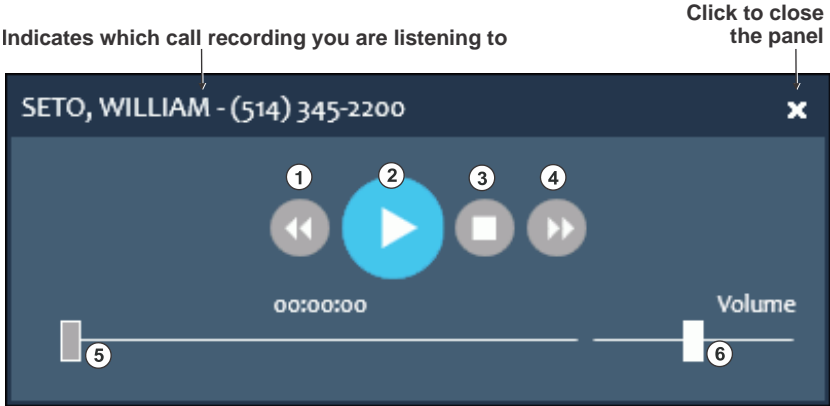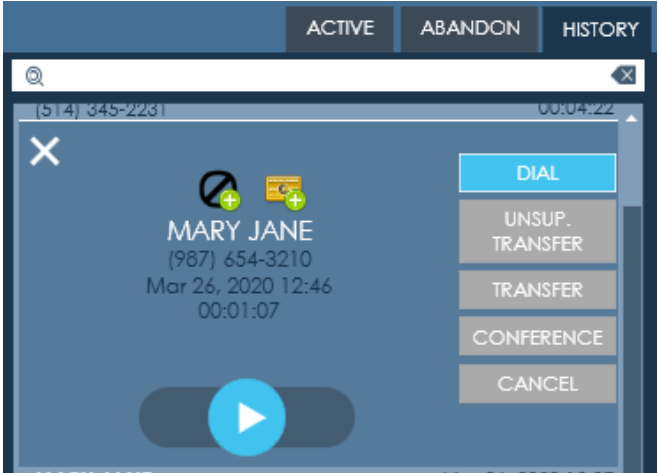
Indicates which call recording you are listening to

Click to close the panel

Softphone - Supervisor Features

Softphone - Agents Statistics

Accessible by both the Agent and the Agent's Supervisor

Softphone - Text to Command Center

Via SMS or Citizen App
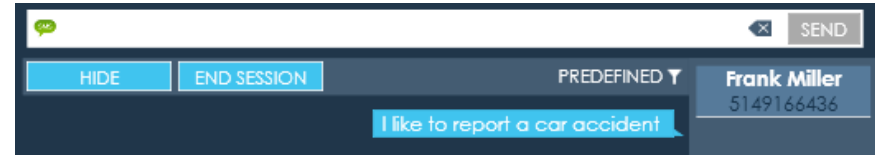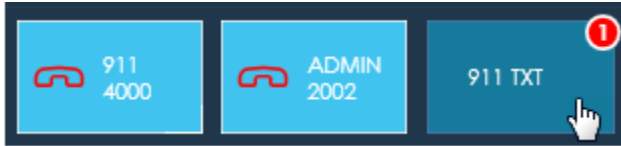
Click to close the viewer

Click and drag the slider to resize the image
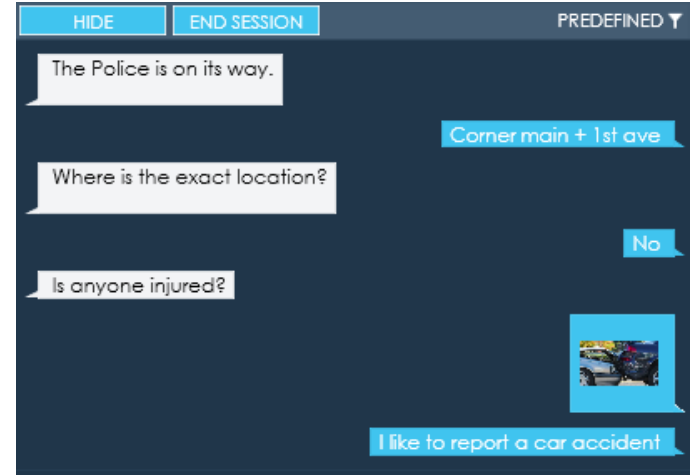
Text Transcript, pictures and videos shared with CAD
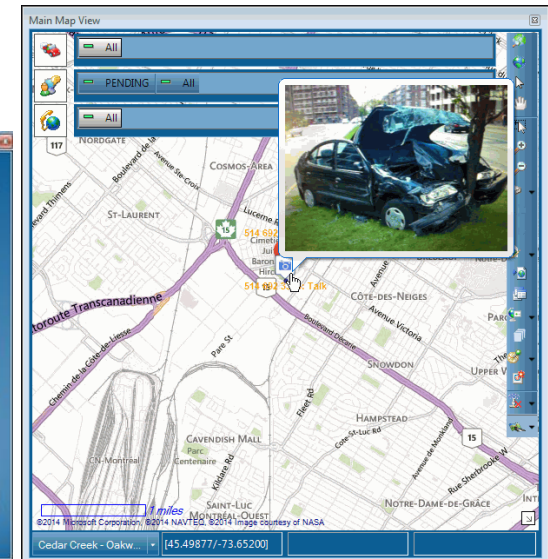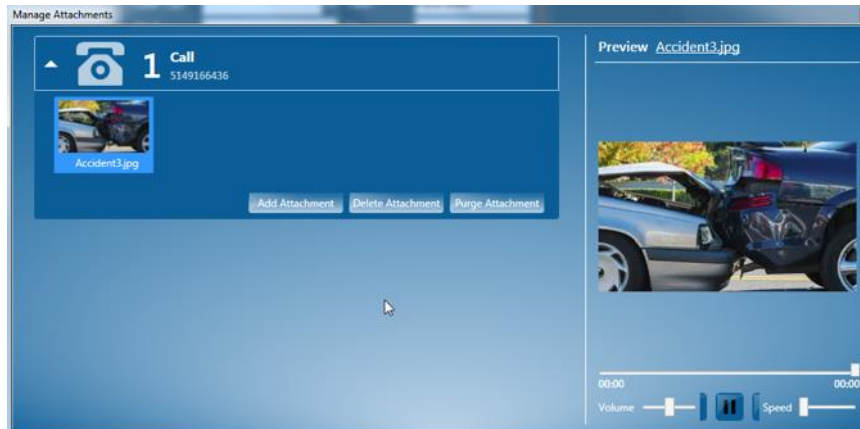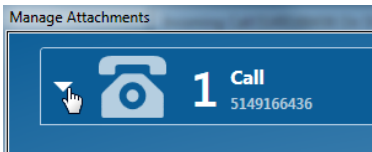
CAD – Layouts by User Profile

Configurable by Agency / User Profile:
Response and resource grid layout, field selection, order, field width, colours, Font size, filter and grouping criteria, placement / size
Unlimited number of grids per User Layout

Configurable Response Detail Window

Configurable by Agency / User Profile:
Fields can be removed, re-ordered, field resized, Font size changed
Tabs can be removed
Buttons can be removed or moved

Configurable Response Detail Window – GIS Layer

Weather Data

Tracking Data

Street Data

Building Data

Vegetation Data

....

Integrated data
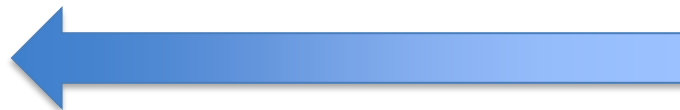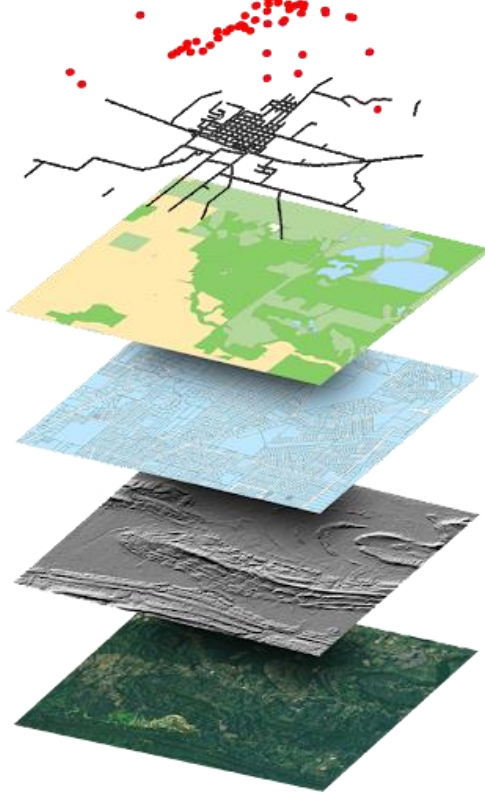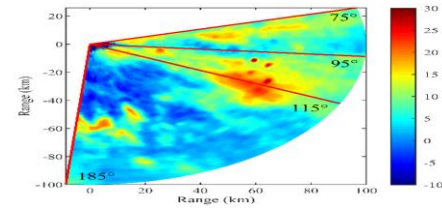
Live data Steaming

Agency Specific MAP Icons

CAD - Resource Status
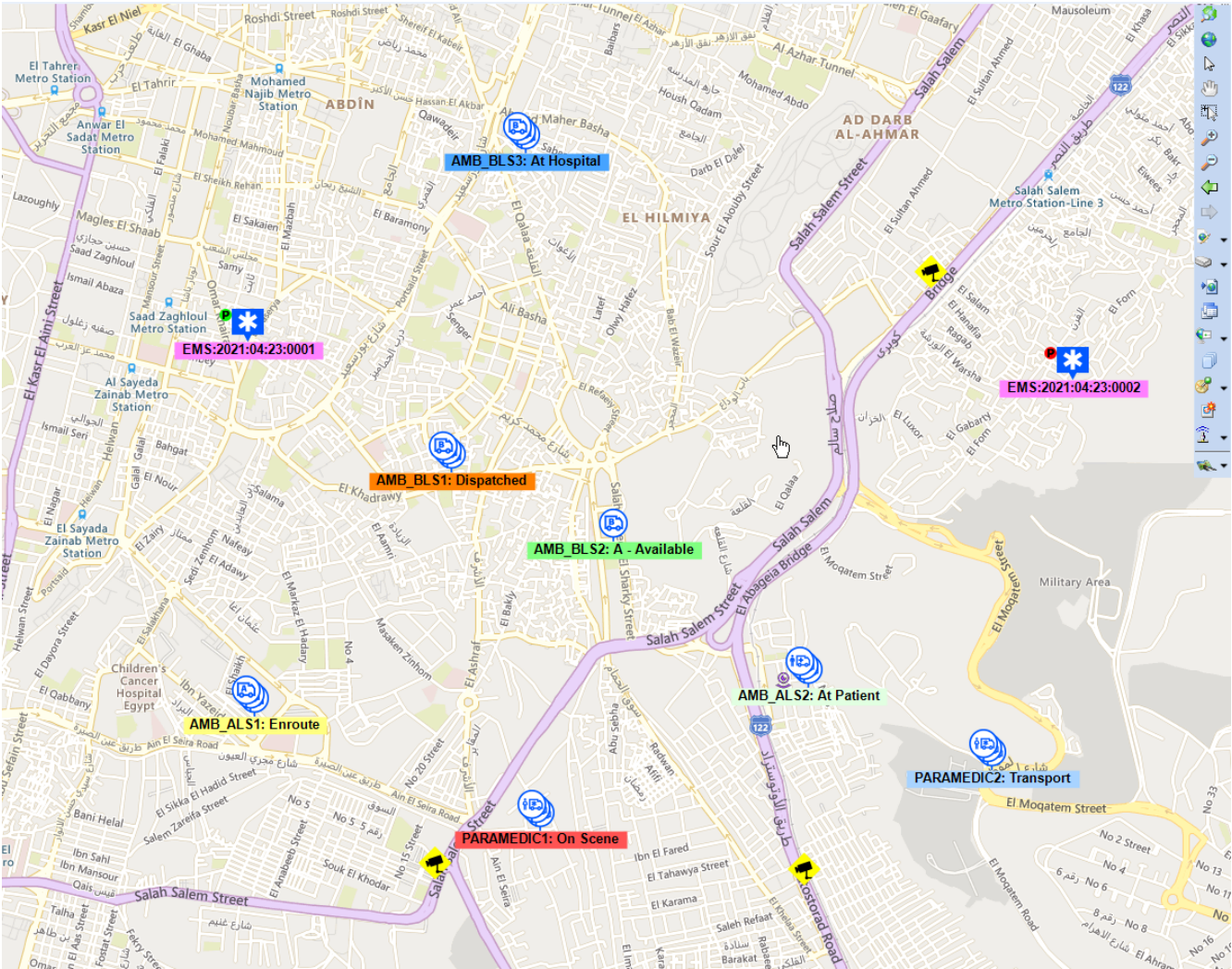
Color coded Resource statuses on MAP match CAD Grids and SAM.

CAD - AVL, Geofence Alert

Speed, Travel Direction
AVL Latency < 30 sec.

AVL Latency - 2 min.

AVL Latency > 4 min.
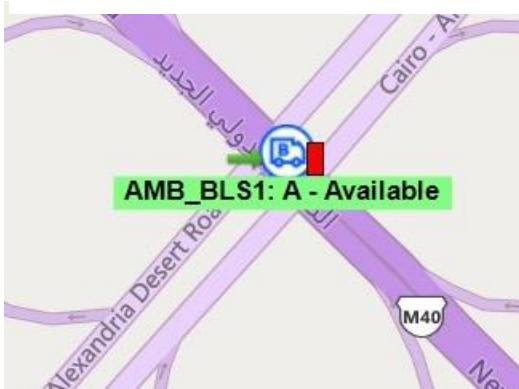
Geofence Alert
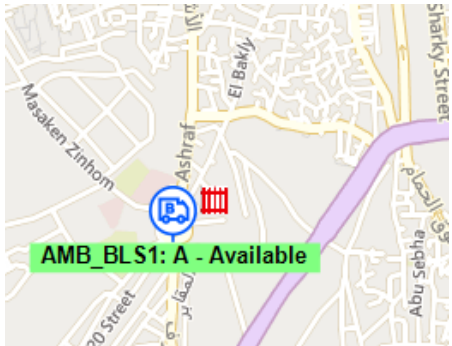
AVL for Resource paired with Mobile CAD App.
Geofence Alert when a Resource enters or exits its assigned Zones or a Dynamic Polygon drawn on the MAP by a CAD user.
Outside Vehicle and On Scene if Patient and Agent leaves the Vehicle (Phase 3)

CAD - Communications

Communication options for MAP actions on one or all Resources
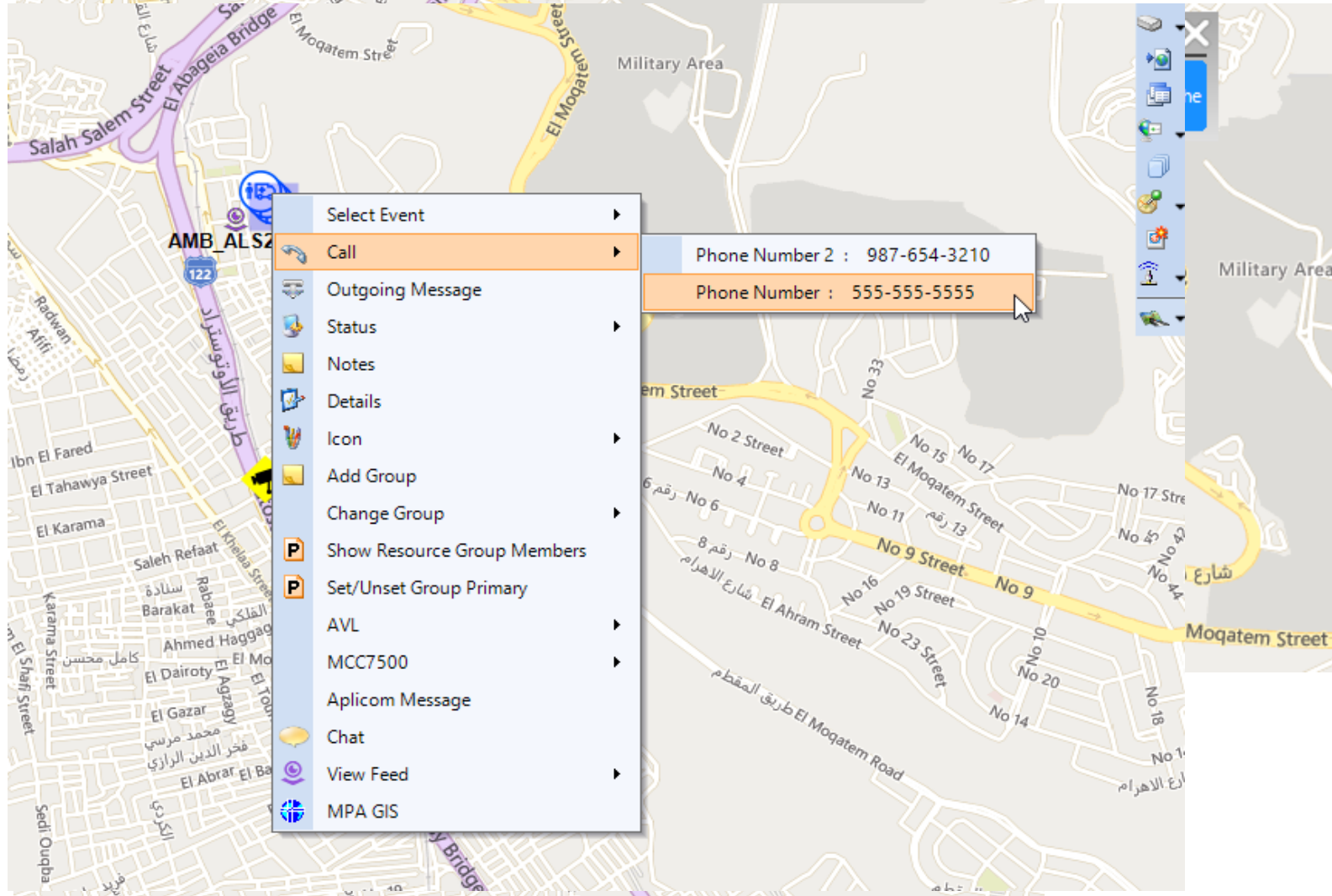
CAD - Integrated Cameras

View street camera feeds:

CAD – CamCap Module

CAD users can capture pictures & video clips and append them to the Response
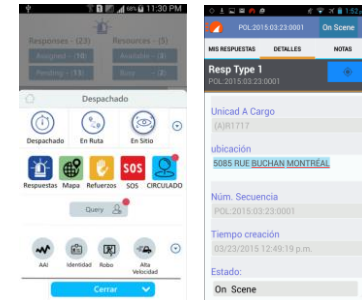
Mobile App

Windows

Android Tablet

SmartPhone Android

- ➤ Receive and generate events,
- ➤ Receive and capture multi-media and append to event,
- ➤ Change resource status without using voice Radio network,
- ➤ View event location on the MAP as well as the GPS position of other resources,
- ➤ Integration with GoogleMAPS or Waze to obtain best routing directions to the event location,
- ➤ External database queries including persons, vehicles, others,
- ➤ Chat with agency personnel and other first responders,
- ➤ Send SOS message and receive SOS from other first responders,
- ➤ View / track resources / events of other units within a field commander's responsibility.

Mobile CAD on Android

Site Activity Monitor (SAM)

On Tablet

On Smartphone

➤ Real-time statistics of Response and Resource activity

➤ Response time indicators

➤ Real-time view of CAD event and resource details as well as their location on the MAP

➤ Available on Android Tablet and Smartphone

EMS Cube - Comparative Statistics
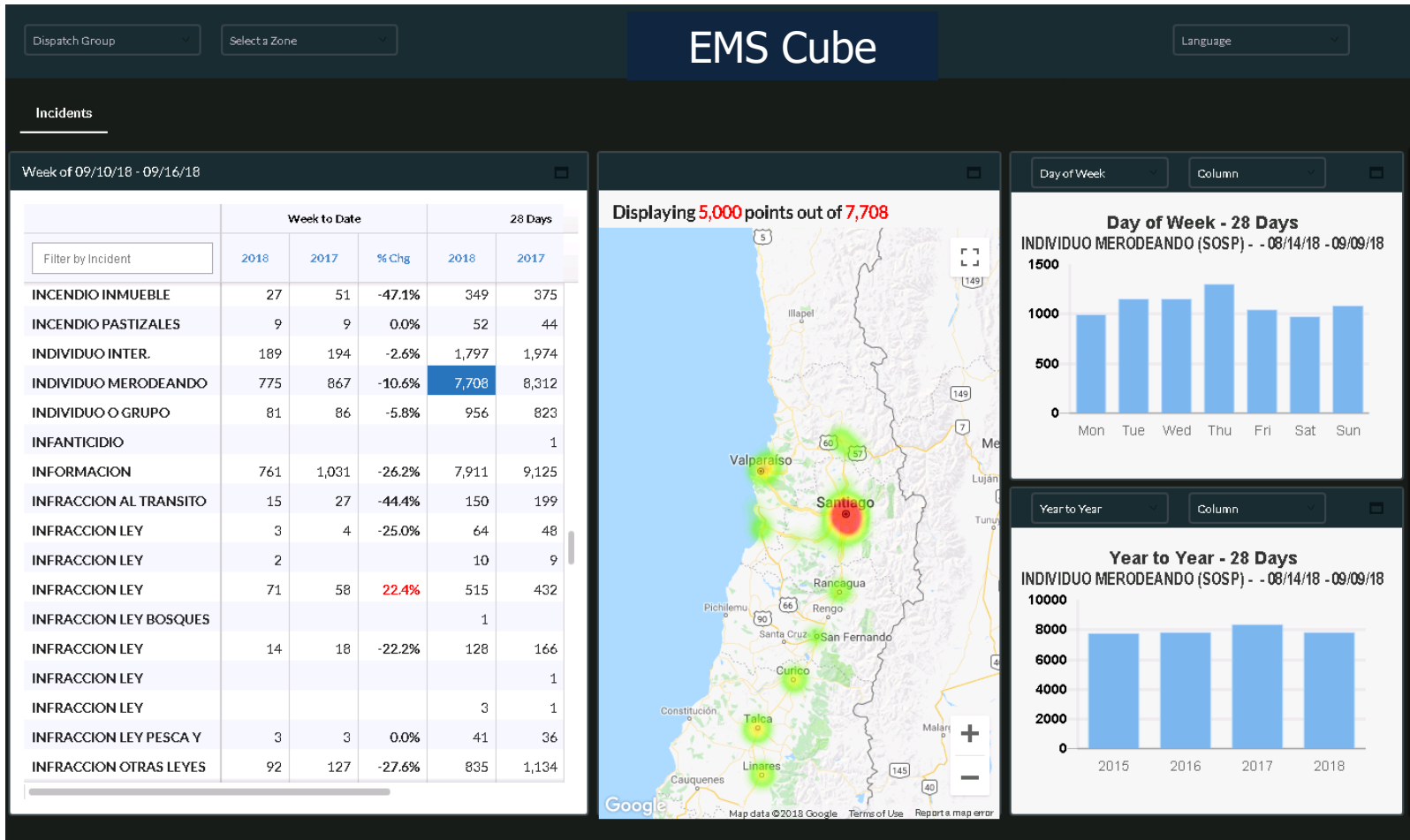
Comparative statistics by response type filtered by dispatch groups and zones showing:

➢ Week to date, last 28 running days & Year to date compared to last year

➢ For a selected incident count, heat maps indicate geographical distribution of incidents, other graphs show hour of day, day of week, dispatch group/zone, weekly over 52-week period and year to year distribution of incidents.

Statistics and Reports

➢ Generate detailed reports and statistics on calls, events, agents and resources, over 500 report templates available

➢ Create custom reports, schedule recurring reports and automatically send reports to distribution list,

➢ ADHOC database provides read only view of all CAD event data for agency IT purposes including connection to Business Intelligence tools