

APCO International

Emerging Technology Forum



THE CRITICAL NEED FOR COMMAND CENTER SITUATIONAL AWARENESS

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GREATER DEMAND ON PUBLIC SAFETY



PUBLIC SAFETY IS EVOLVING

Video and multimedia adoption

Smart devices and applications

Analytics and data-sharing

Preparedness for NG9-1-1

Voice & data interoperability needs

Rapid multi-agency response

Cloud services and applications

Increasing challenge to operationalize and mobilize data.

WHAT IS SITUATIONAL AWARENESS?

Situational Awareness is the **ability to identify, process, and comprehend** the **critical elements** of information with respect to **time** and **space**. More simply, it's knowing **what is going on around you** at all times.

RIGHT INFORMATION



RIGHT PERSON



RIGHT TIME



**INTELLIGENCE-LED RESPONSE TURNS
DATA INTO INTELLIGENCE, INTELLIGENCE
INTO ACTION AND ACTION INTO SAFETY**

THE CURRENT STATE



- ☐ What They Have
- ☐ What They Don't

Agency Capabilities

RMS
Query
CAD Incidents
LMR Voice
Predictive Analytics
Link Analysis
Resource Location
Geolocation Intelligence
Rapid Search
Real-Time Intelligence
Automated Workflows
National Data Access
Crime Analytics
Social Analytics
Data Sharing
Streaming Video

LIMITED CAPABILITIES AND WORKFLOWS LEAD TO A REDUCTION IN SAFETY

CURRENT STATE CHALLENGES



Cost



Complexity



Workflow
Efficiency



Value

FOR EVERY
NEW
CAPABILITY,
SYSTEM OR
DATA SET
ADDED

AGENCY VALUE IS ADDITIVE AT BEST

THE VALUE OF THE PLATFORM

- Rapid deployment
- Easier integration
- Simplified data management
- Agency-wide sharing
- Streamlined workflows
- Lower TCO
- Reduced complexity
- Scales to needs
- Secure data and access



SHARED DATA AND CAPABILITIES PROVIDE AGENCY-WIDE BENEFITS

SITUATIONAL AWARENESS IS NOT JUST ABOUT NOW



Where are we going?

What could happen?

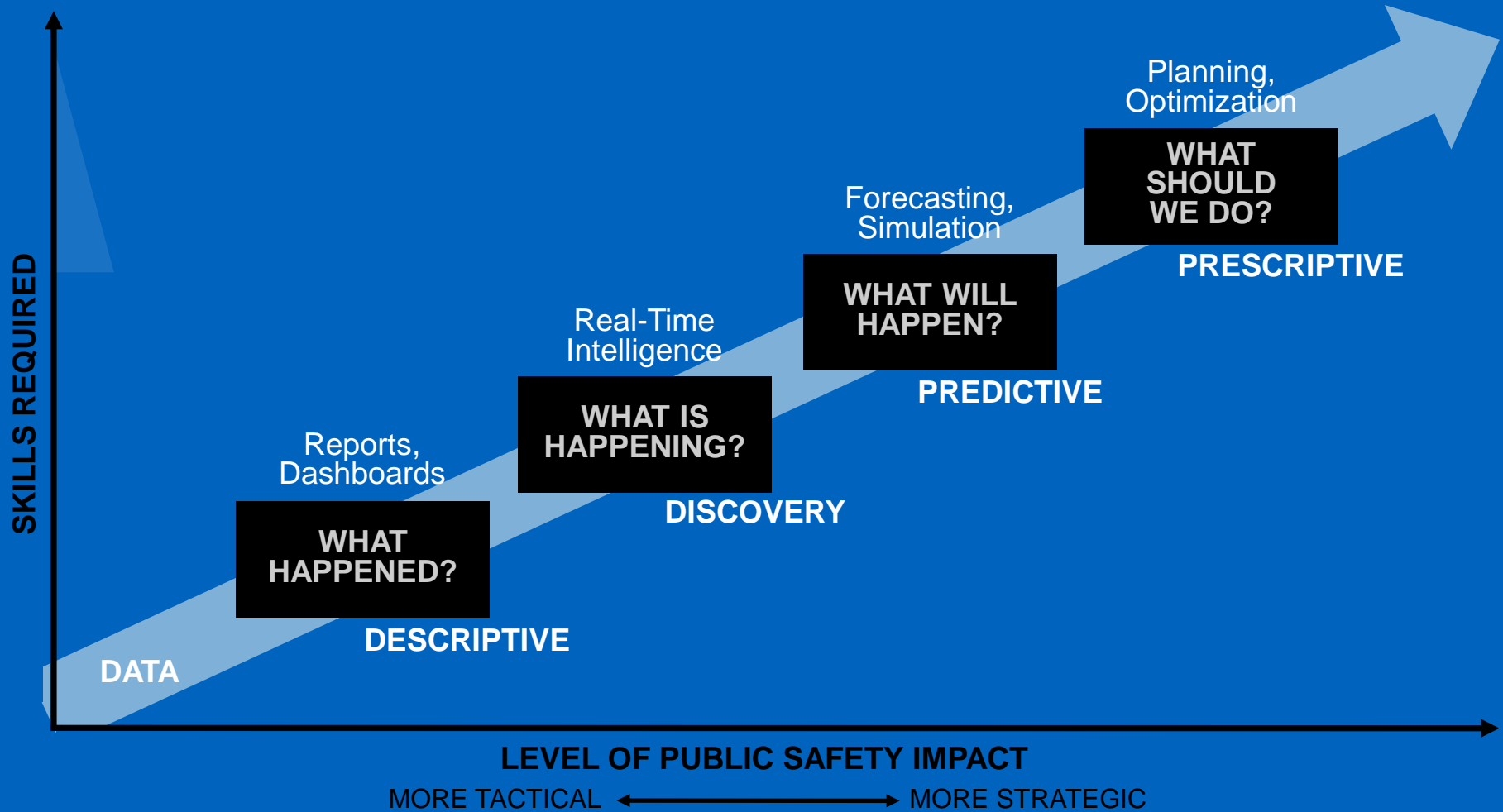
Where are we?

What is happening?

Where were we?

What happened?

ANALYTICS CONTINUUM



CONVERTING BIG DATA

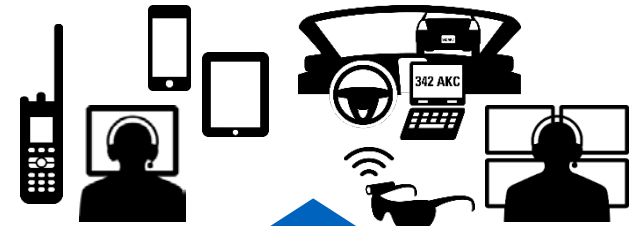
GLOBAL DATA



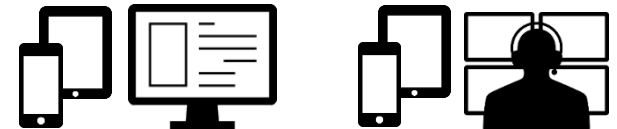
DATA

ANALYTICS

PUBLIC SAFETY



INTELLIGENCE

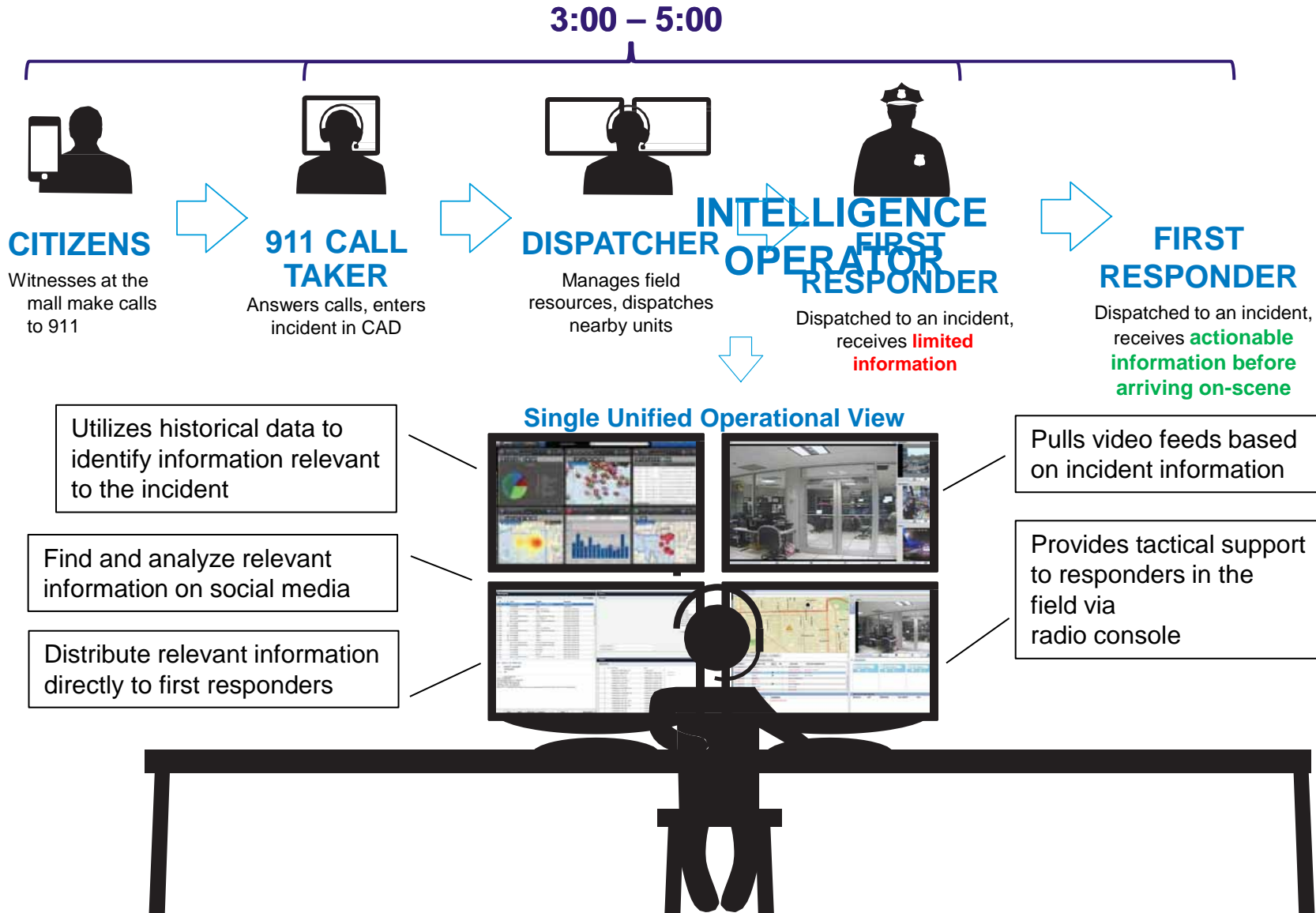


CITIZENS & BUSINESSES

PUBLIC SAFETY DATA



STREAMLINED WORKFLOW



FROM DATA TO SAFETY



TURN DATA INTO
INTELLIGENCE

INTELLIGENCE INTO
ACTION

ACTION INTO
SAFETY

COMMON OPERATING PICTURE

Integrated CAD/RMS, video with analytics, messaging, mapping layers, social media and LMR voice ensure rapid analysis, correlation, sharing and response. All within a streamlined workflow.



TACTICAL SUPPORT

A photograph of two police officers in dark blue uniforms. The officer on the right is seen from the side, holding a smartphone and looking at the screen. The officer on the left is seen from the back, wearing a coiled radio cord. They are standing outdoors in front of a brick building. A semi-transparent blue box with white text is overlaid on the left side of the image.

Mug shots, video streams, outstanding warrants, probation and parole records - these collective, data-centric resources provide responders richer insight before they reach the scene.

STREAMLINED WORKFLOW

FileMonitor LayoutsHelp

Current Server:Default Server

MAP VIEW

Home View

Map Preferences

Legend

Maps

Center

Search Map

VIDEO VIEW

G5.2 FREEWAY

G5.2 INTERSECTION

G5.2 OVERPASS

G5.2 WALKWAY

VIDEO OPTIONS

SMART CLIENT

CAD INCIDENT MONITORALARM MONITOR

TIME	TYPE	LOCATION	LOCATION DESCRIPTION	CAMS	2.0	SEVERITY	SOURCE	ID
7/25/2014 11:12:37 AM	Gun Shot	98th & Vicksburg Ave	Intersection		✓	1	LAPD	G521513
7/25/2014 10:27:01 AM	ALPR	Century Blvd	Fixed ALPR reader on eastbound Centry		✓	4	LAWA	ALPR2
7/10/2014								

ALARM DETAILS: 7/25/2014 10:27:01 AM ALPR CENTURY BLVD

ATTACHMENTS	SOURCE INFORMATION	ASSOCIATIONS	NEARBY CAMS	ADDITIONAL ACTIONS
	Plate region: CA Plate text: NJG629 Was plate misread: false Was plate manually entered: false Plate decode confidence level: 1 Site name: LAWIA Notes from plate reader: Eastbound Detailed Description: Automated license plate reader identified a license plate that is on the NCIC hit list. GPS DETAILS: Latitude: 33.9454 Longitude: -118.386 Altitude: 0	LACY	G5.2 INTERSECTION G5.2 OVERPASS LAX Terminals G5.2 FREEWAY G5.2 WALKWAY	

RADIO CONSOLE

Settings

TG-1 Police

TG-5 Ambulance

Mute All

Audio

Monitor

General

New Tile

Tile Views

Push to Talk

PUSH TO TALK STATUS MONITOR


DEVICE	RESOURCE	STATUS	TIME
Captain Lacey	TG-1-Police	Emergency Alarm	11:36:01 AM
Captain Lacey	TG-5-Ambulance	Radio PTT	11:35:35 AM
EMT Raji	TG-5-Ambulance	Radio PTT	11:35:34 AM
Captain Lacey	TG-5-Ambulance	Radio PTT	11:35:32 AM

(7/25/2014 11:31:59 AM) TG-5-Ambulance: Resource is now ready to send and receive audio.

INTEGRATED VOICE

File Monitor Layouts Help

MAP VIEW










Home View Map Preferences Legend Maps 3D Center

CAD INCIDENT MONITOR ALARM MONITOR

TIME	TYPE	LOCATION	LOCATION DESCRIPTION	CAMS	2.0	SEVERITY	SOURCE
7/25/2014 11:12:37 AM	Gun Shot	98th & Vicksburg Ave	Intersection	✓		1	LAPD
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7/10/2014							

ALARM DETAILS: 7/25/2014 10:27:01 AM ALPR CENTURY BLVD

ATTACHMENTS	SOURCE INFORMATION	ASSOCIATIONS	NEARBY CAMS	PLAY ALL	ADDITIONAL ACTIONS
 plate.jpg	Plate region: CA Plate text: NJG629 Was plate misread: false Was plate manually entered: false Plate decode confidence level: 1 Site name: LAWIA Notes from plate reader: Eastbound Detailed Description: Automated license plate reader identified a license plate that is on the NCIC hit list. GPS DETAILS: Latitude: 33.9454 Longitude: -118.386 Altitude: 0	 LACY	 G5.2 INTERSECTION  G5.2 OVERPASS  LAX Terminals  G5.2 FREEWAY  G5.2 WALKWAY		

LEVERAGE YOUR MISSION-CRITICAL COMMUNICATIONS INVESTMENT

Access mission-critical radio communications directly

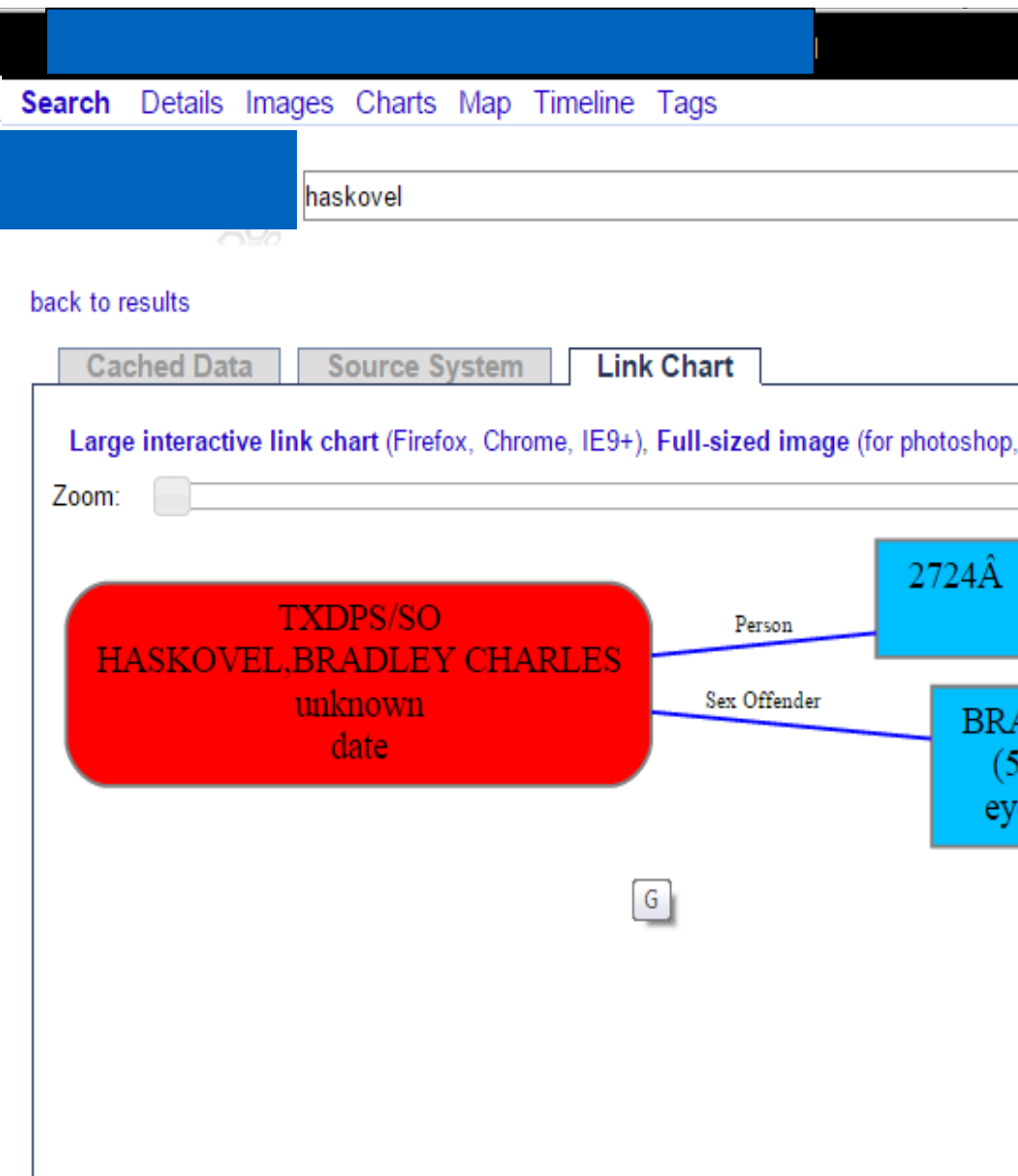
Monitor multiple talkgroups simultaneously

Communicate directly with first responders

Identify units that are talking on the map and radio module

Radio emergencies need to be immediately displayed

SEARCH AND DATA SHARING



REACH ACROSS JURISDICTIONAL BOUNDARIES IN THE MOMENTS THAT MATTER

Unified search of cross-agency and cross-jurisdiction data sources

- CAD / RMS / ALPR
- Interview Cards
- Open Web-Search

Custom configuration options for prioritized datasets

Natural language search of unstructured inputs, partial fields, and public safety terminology

Sort by relevancy

Access to a nationwide network of data

QUERY

File Monitor Layouts Help

MAP VIEW SMART CLIENT

Help

15:00:06

Friday, January 30

About Smart Client

Address Book

BQLO

Messaging

Query (13)

Responses (13)

Request

Pending

Sent

Drafts

CAD INCIDENT

TIME

10/2 12:0

10/2 12:0

10/2 12:0

10/2 12:0

10/2 12:0

10/2 12:0

ATTACHMENTS

SOURCE INFORMATION

Query

Responses

#	H/H	Summary	Sent
3		PlateQuery: abc123; CA; All	14:57:17
4		PersonQuery: John Patrick Greene; All; 3/5/1982	01/29/2015 09:21:42
4		PersonQuery: John Patrick Greene; All; 3/5/1982	01/28/2015 17:35:40
0		P1RMS_People: All; 3/5/1982; John ; Patrick ; Greene	01/28/2015 16:51:16
3		CAPlateQuery: 1shd100; CA	01/26/2015 17:08:52
H/H	Pri	Summary	Response Type
9		4DEMO00050Z.IM; MPS INQUIRY; MISSING PERSON; D	MPS-MissingP
9		4DEMO00050Z.IA; QV:CA0100DMO.IJC/1SHD100; NO H	SVS-NoRecor
9		4DEMO00050Z.IV; DATE: 10/22/12 TIME: 14:00; INSUR	DMV-VehicleR
8		CAPlateQuery-Cascade: 1shd100; CA	01/21/2015 17:08:52
H/H	Pri	Summary	Response Type
9		4DEMO00050U.IA; QV:CA0100DMO.IJC/1SHD100; NO H	SVS-NoRecor
0		4DEMO00050W.II; 1101; CA0100DMO; ***MESSAGE KEY	NCIC-Wante
9		4DEMO00050W.IW; CA0100DMO RE: QW:CA0100DMO.I	WPS-Wante
9		4DEMO00050W.IR; CA0100DMO RE: QVC:CA0100DMO.I	SRF-NoRecor
9		4DEMO00050W.IB; 8YYX:CA0100DMO; RE: QRR:CA0100E	CARPOS-No
9		4DEMO00050W.IN; DATE:04-28-11*TIME:10:27*; MATCH	DMV-Driver
9		4DEMO00050U.IV; DATE: 10/22/12 TIME: 14:00; INSUR	DMV-Vehicle
9		4DEMO00050U.IM; MPS INQUIRY; MISSING PERSON; DA	MPS-Missing
2		PersonQuery: john greene; All	01/16/2015 17:08:52
1		PersonQuery: John Greene; All	01/16/2015 17:08:52
1		PersonQuery: John Greene; All	01/14/2015 14:51:16
1		PersonQuery: John Greene; All	01/14/2015 14:51:16
3		CAPlateQuery: 1shd100; CA	01/14/2015 14:51:16
1		PersonQuery: john greene; All	01/14/2015 13:11:15

UNLOCK THE POWER OF YOUR OWN DATA INSTANTLY

Query internal and external databases simultaneously (Federated Query)

Distribute query results via built-in messaging service

Smart Copy (data copy) – update or create incidents based on query results

Automatic cascading queries – look up additional information in a query return without human action

Hot hit – instantly alert dispatch and nearby first responders for specific query results

VIDEO SURVEILLANCE AND ANALYTICS

VIDEO VIEW

VIDEO OPTIONS

VIDEO LAYOUT Cam Views

☐ 1-up ☐ 2-up ☐ 4-up

☐ 1+3 ☐ 2+4 ☐ 2+6

☐ 1+8 ☐ 2+8 ☐ 16-up

ALL SOURCES

TYPE	CAM	REC	MAP
	AgentVI		
	Diamond Pawn Inside		
	Diamond Pawn Outside		
	I90 Exit 51		
	JJ Peppers - Cashier#1		
	JJ Peppers - Cashier#2		
	JJ Peppers - North		
	JJ Peppers - South		
	NB LaSalle Dr @ Lake Shore...		
	SB LaSalle Dr @ Lake Shore...		
	Unit 1814		
	W Washington Blvd @ Clint...		

Refresh **Last updated: 1/28/2015 4:49:49 PM**

<Enter Search Criteria>

AgentVI

Tuesday, September 23, 2014 4:07:20 PM

Diamond Pawn Outside Unit 1814

7/10/2014 6:54:35 PM

ACCESS ALL YOUR VIDEO AND ANALYTICS FROM ONE LOCATION

Aggregate video sources and video management tools in one application

Automatically detect & alert users to several analytics simultaneously in real time

- Line crossing
- Tailgating
- Suspicious activity
- Stopped vehicle

‘Chained’ alerts for more accurate detection

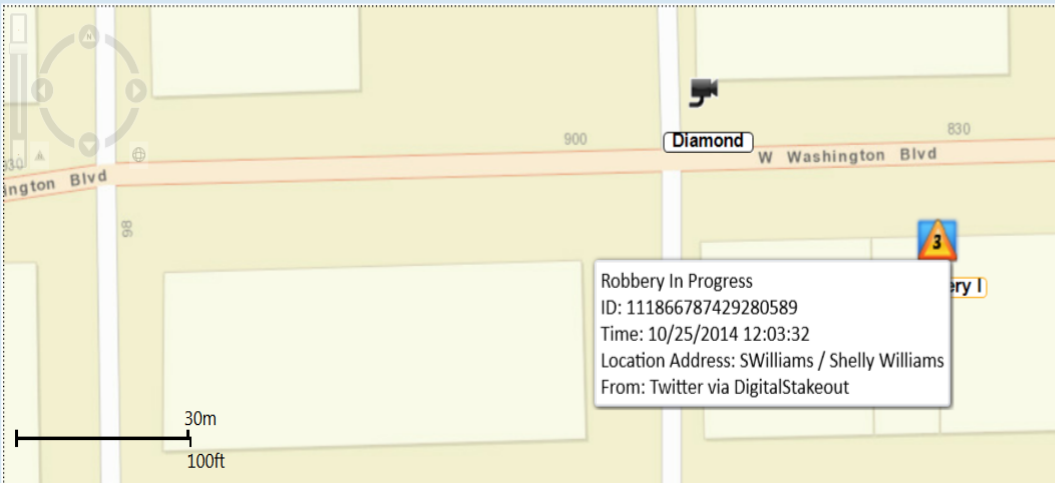
Summarize hours of past video to replay in minutes

Filter video by color, speed, direction, size and similarity

SOCIAL MEDIA MONITORING AND ANALYTICS

File Monitor Layouts Help

MAP VIEW



Robbery In Progress
ID: 111866787429280589
Time: 10/25/2014 12:03:32
Location Address: SWilliams / Shelly Williams
From: Twitter via DigitalStakeout

Home View Map Preferences Maps

CAD INCIDENT MONITOR ALARM MONITOR

	TIME	TYPE	LOCATION	LOCATION DESCRIPTION
1	10/25/2014 12:22:52 PM	ALPR HIT		I90/I94 SB
1	10/25/2014 12:14:36 PM	ALPR HIT		I55 WB
1	10/25/2014 12:10:12 PM	ALPR HIT		Lake Shore Drive SB
3	10/25/2014 12:08:12 PM	Suspicious Package		Wrigley Field
1	10/25/2014 12:05:32 PM	Officer Emergency		
3	10/25/2014 12:03:32 PM	Robbery In Progress	SWilliams / Shelly Williams	

ALARM DETAILS : 10/25/2014 12:03:32 PM ROBBERY IN PROGRESS SWILLIAMS / SHELLY WILLIAMS

ATTACHMENTS	SOURCE INFORMATION
	Tags : Inferred Geo, Alert Sent
	Location : Chicago, Illinois, United States

KEEP YOUR EARS TO THE GROUND FOR BETTER COMMUNITY LED POLICING

Perform people searches across 250 million profiles

Initiate searches of archived data to produce obscure associations

Automatically alert operators to important social postings based on agency rules

Create keyword rules for units and departments to address specific needs

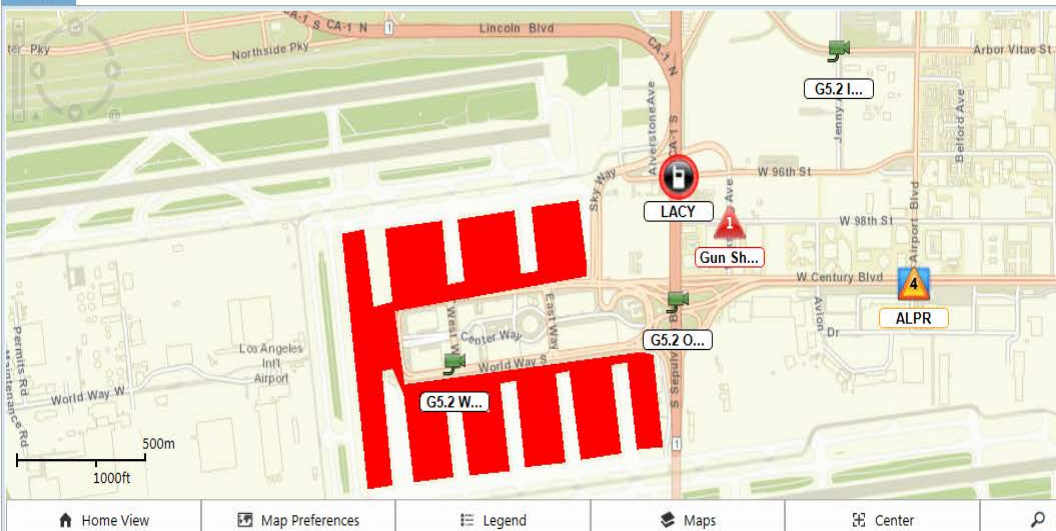
Allows for faster location of evidence and witnesses

Faster correlation with additional incident related data sources

THREAT DETECTION AND ALERTING

File Monitor Layouts Help

MAP VIEW



CAD INCIDENT MONITOR ALARM MONITOR

TIME	TYPE	LOCATION	LOCATION DESCRIPTION	CAMS	2.0	SEVERITY	SOURCE
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MULTIPLE EVENT GENERATING SOURCES – A SINGLE ALERTING PLATFORM

Architected to support for integration with countless event sources

Create opportunities for more informed responses by combining it with other data sources within the client

Create templates for units, departments and specific needs

TG-1 Police				TG-5 Ambulance			
Captain Lacey	Radio PTT	11:35:11 AM		EMT Raj	Radio PTT	11:35:35 AM	
EMT Raj	Radio PTT	11:35:10 AM		Captain Lacey	Radio PTT	11:35:31 AM	
Captain Lacey	Emergency Alarm	11:34:50 AM		EMT Raj	Radio PTT	11:35:30 AM	
Captain Lacey	Radio PTT	11:34:56 AM		Captain Lacey	Radio PTT	11:35:28 AM	
Captain Lacey	Emergency Alarm	11:34:11 AM		EMT Raj	Radio PTT	11:35:27 AM	

Mute All Audio Monitor General + New Tile Tile Views

PUSH TO TALK STATUS MONITOR

DEVICE	RESOURCE	STATUS	TIME
Captain Lacey	TG-1-Police	Emergency Alarm	11:35:01 AM
Captain Lacey	TG-5-Ambulance	Radio PTT	11:35:35 AM
EMT Raj	TG-5-Ambulance	Radio PTT	11:35:34 AM
Captain Lacey	TG-5-Ambulance	Radio PTT	11:35:32 AM

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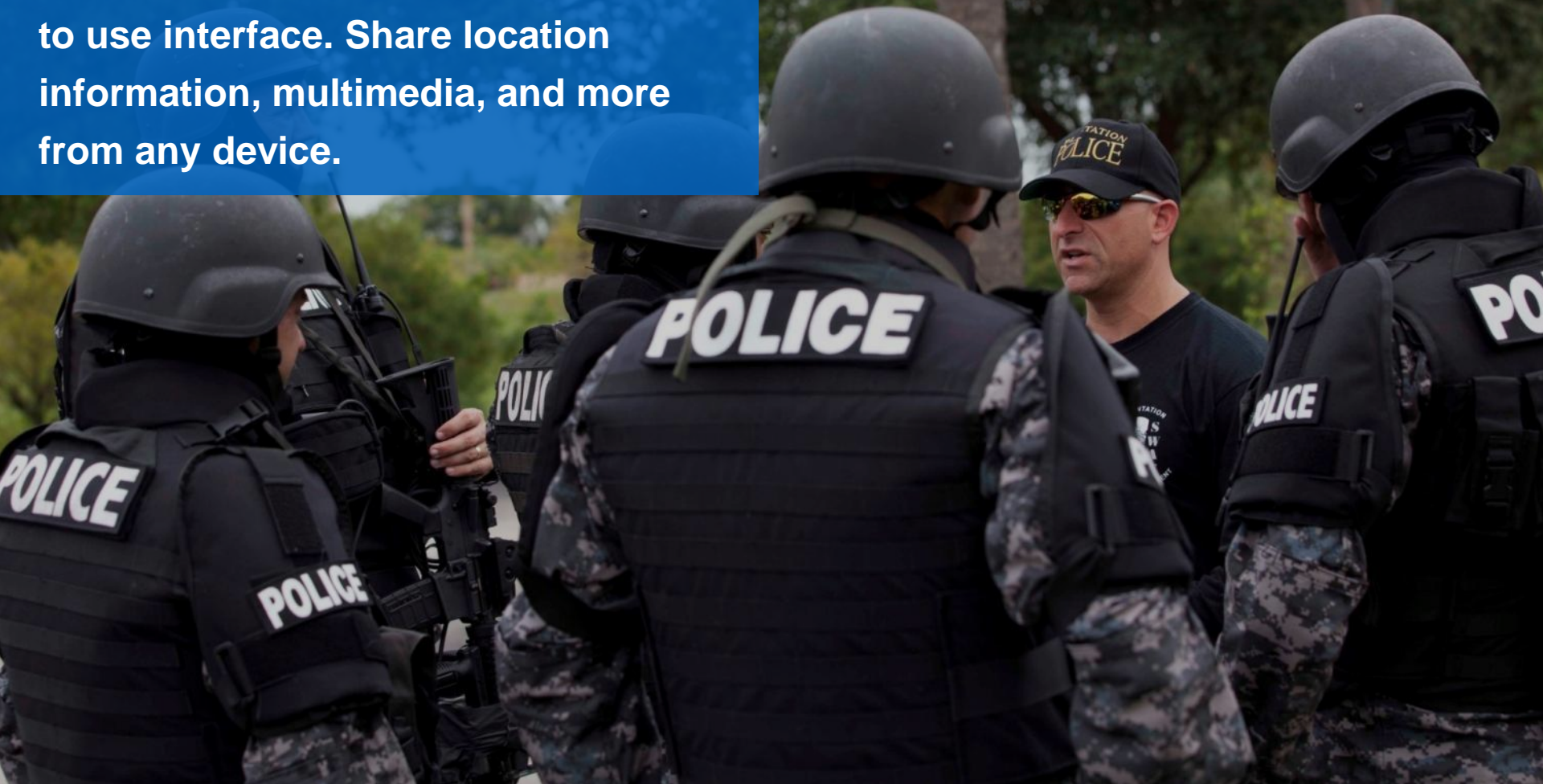
ACTIVE VISION OF THE FIELD

Officers, Incident Commanders and Investigators in the field need continuous location-based information to better coordinate response and improve decision making.



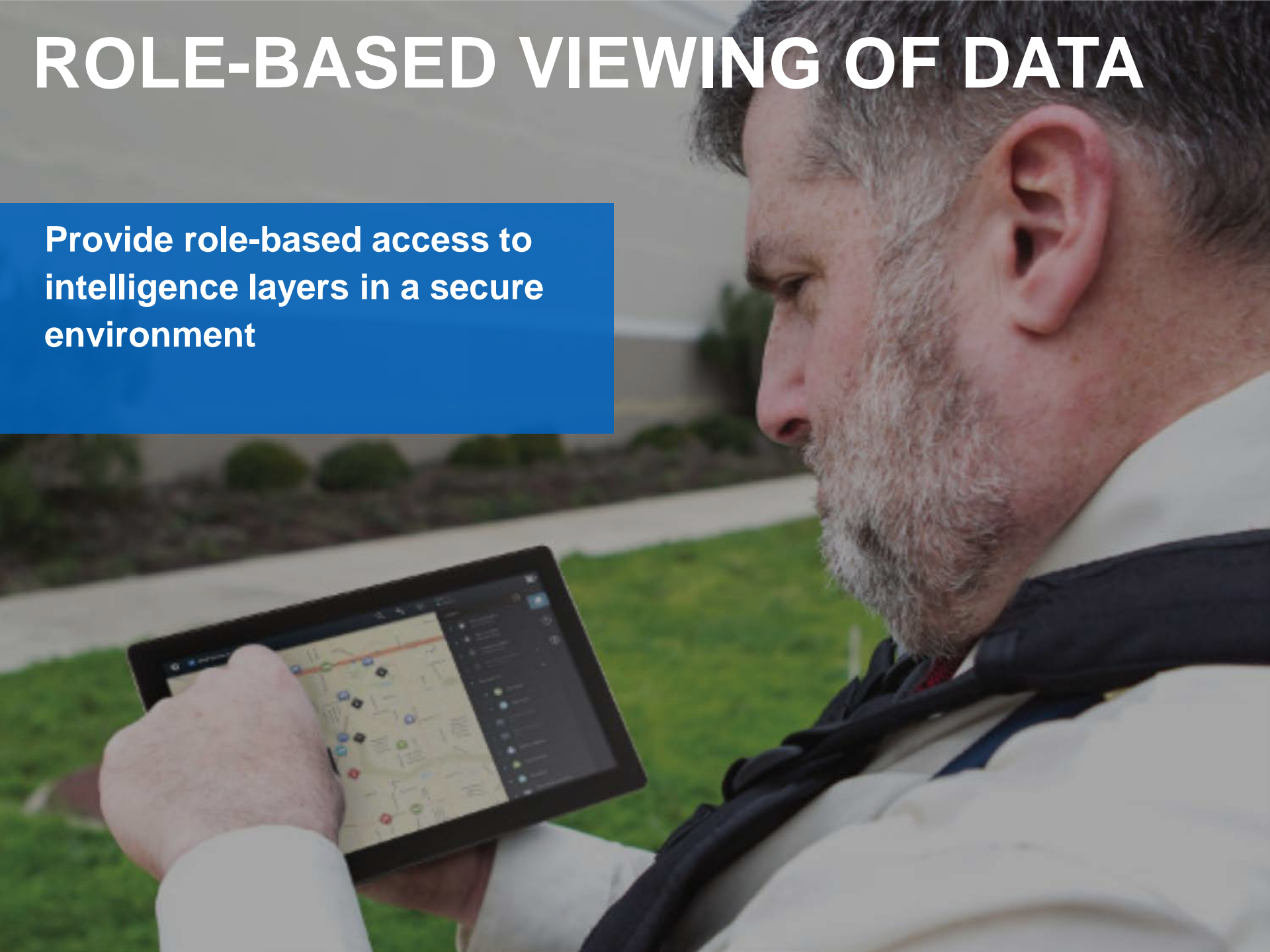
ON-DEMAND TEAM COLLABORATION

Access critical information from multiple data bases through one easy to use interface. Share location information, multimedia, and more from any device.



ROLE-BASED VIEWING OF DATA

Provide role-based access to intelligence layers in a secure environment



REMEMBER

CENTRALIZE

AUTOMATE

DISSEMINATE

THANK YOU!

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