

# Solving Police Investigations in a Digital World

**CRIME SCENE DO NOT CROSS**

**NICE** ■ Investigate

Collecting, Analyzing & Sharing Digital Evidence



# Table of Contents



3	Charles Ramsey	9	Solving the Data COLLECTION Challenge	15	Investigator Has Relevant Content	21	Sharing Made Simple
4	DC Sniper Case	10	Evidence Stored in Silos	16	Using Content Analytics to Uncover New Insights	22	Delivering a Compelling Story
5	Boston Marathon Bombing	11	NICE Investigate Breaks Down Silos	17	Putting Evidence Into Context: Timeline View	23	Next Steps
6	Investigators Typically Work Multiple Cases	12	Connection to Available Sources	18	Putting Evidence Into Context: Map View		
7	Investigations Getting More Complex	13	Solving the Data ANALYSIS Challenge	19	Solving the Data SHARING Challenge		
8	Introducing NICE Investigate	14	How It's Done Today	20	Sharing Evidence is Highly Manual		





## Charles Ramsey

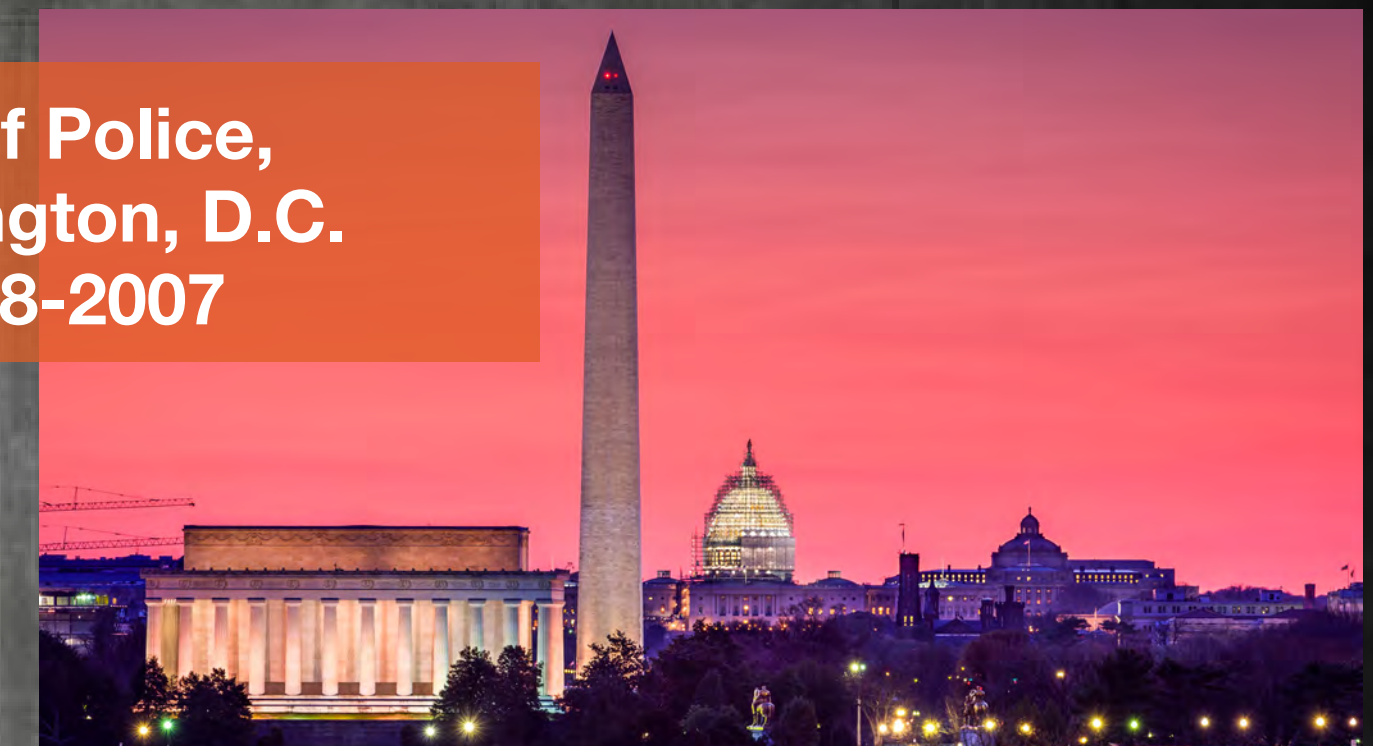
Retired Philadelphia  
Commissioner of Police

- 47 years in law enforcement
- Past President of Major Cities Chiefs and Police Executive Research Forum
- Former member of the International Association of Chiefs of Police Executive Committee and the U.S. Department of Homeland Security Advisory Board

30 years at  
Chicago PD

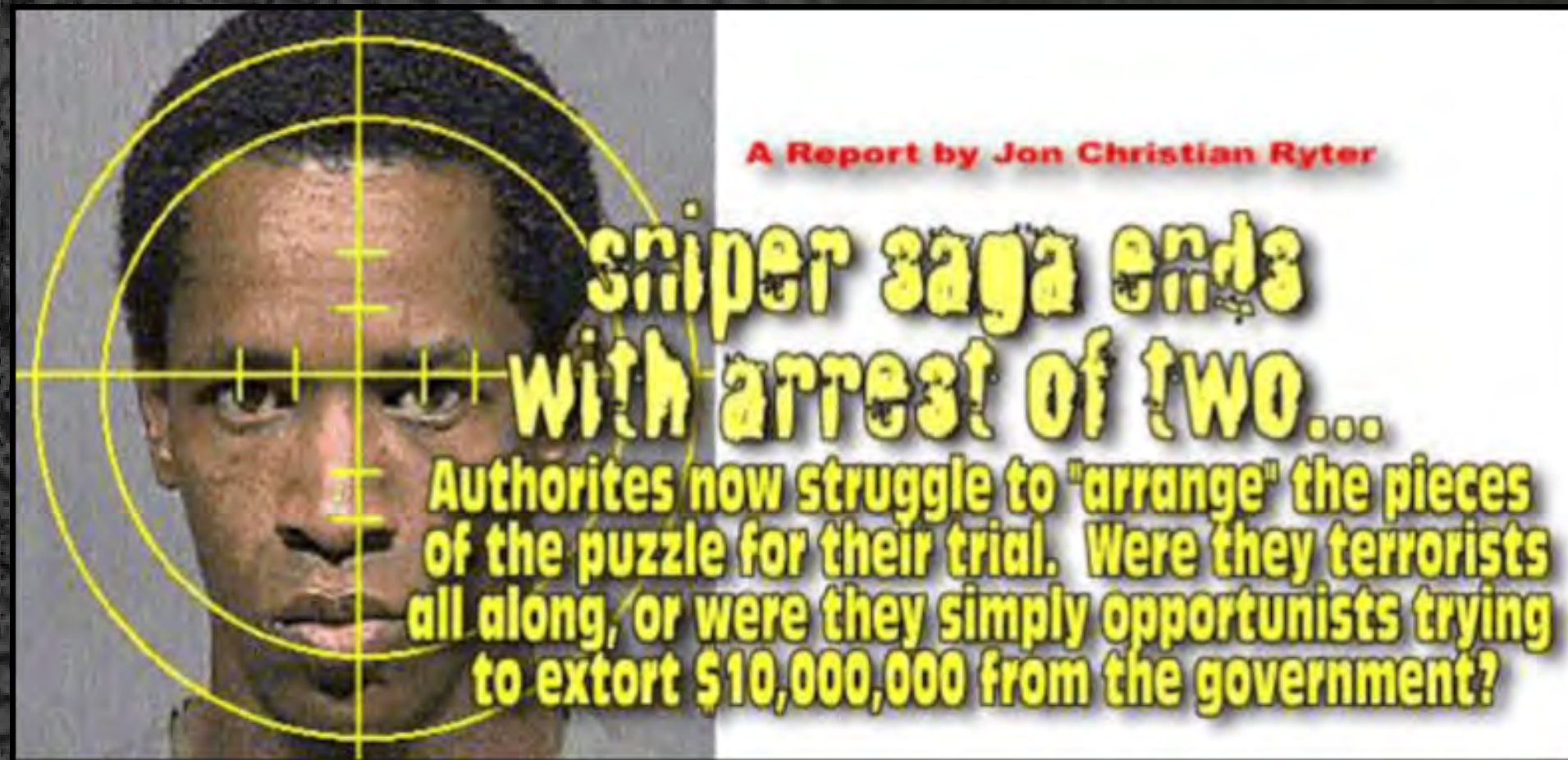


Chief of Police,  
Washington, D.C.  
PD 1998-2007



Police Commissioner,  
Philadelphia PD  
2008-2016





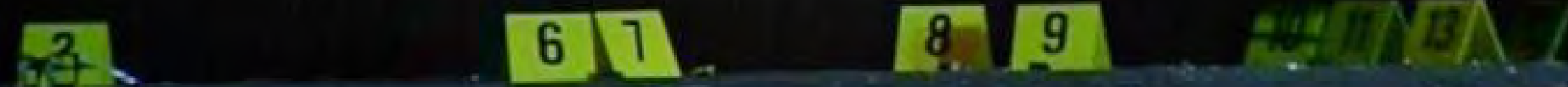
In October, 2002 when Charles Ramsey was Chief of Police in Washington, D.C., one of the country's most notorious crimes took place in and around DC. It became known as the DC or Beltway Sniper case. At that time, surveillance cameras, smart phone video, and text messaging were not widely used by the public.

Whenever a crime is committed, PDs always ask for the public's help in providing information. The issue is how to handle the volume of information that comes into the department as well as the information from within the PD or from other agencies.

**Imagine what it would have been like if the Beltway sniper case had happened today.**



**Most likely there would have been an overwhelming amount of digital information.**



# Boston Marathon Bombing

*Overwhelmed is exactly what happened in the aftermath of the Boston Marathon Bombing when the Boston police server set up to accept crowdsourced information was inundated with 13,500 submissions of photos and videos in the first 24 hours.*



Ultimately, it was crowdsourced information, coupled with CCTV video, that led authorities to the Tsarnaev brothers. However, it took the FBI and hundreds of detectives from local, state and federal agencies working around the clock to collect and analyze the enormous volume of evidence. An automated solution that could have shortened the time needed and reduced the manpower required to go through the collected evidence, would have been invaluable.

# Investigators Typically Work Multiple Cases



Police departments across the country work on tens of thousands of investigations annually. Typically, an investigator is working multiple cases simultaneously. These are not high-profile cases with lots of resources but the robberies, burglaries, drug deals, car jackings, sexual assaults and homicides that happen every day.

In order to close these cases faster and increase successful prosecutions, investigators need a more automated approach that expedites collecting, analyzing and sharing evidence.



# Investigations Getting More Complex

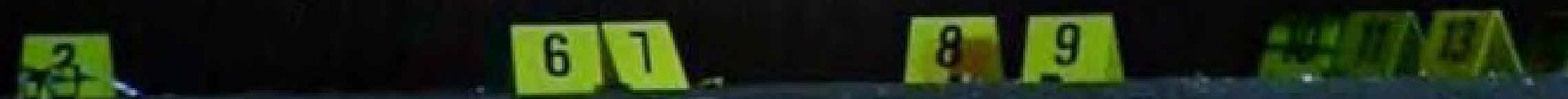
As the Boston Marathon Bombing case illustrates, large volumes of digital evidence, especially video, is making investigations more complex than ever before. Any one piece of evidence could hold the key to an investigation. But with so much evidence, stored in so many different standalone systems, it is more challenging than ever for investigators to put together the who, what, where, when and why of their cases.

Once they do, there are limited tools for easy sharing of the evidence with others such as when briefing their chain of command, working with other agencies during an investigation or when ready to seek filing consideration from a District Attorney's office.



- WHO?
- WHERE?
- WHAT?
- WHY?
- WHEN?

**In most cases the burden of copying the collection of paper reports, USB drives and DVDs falls on the investigator.**



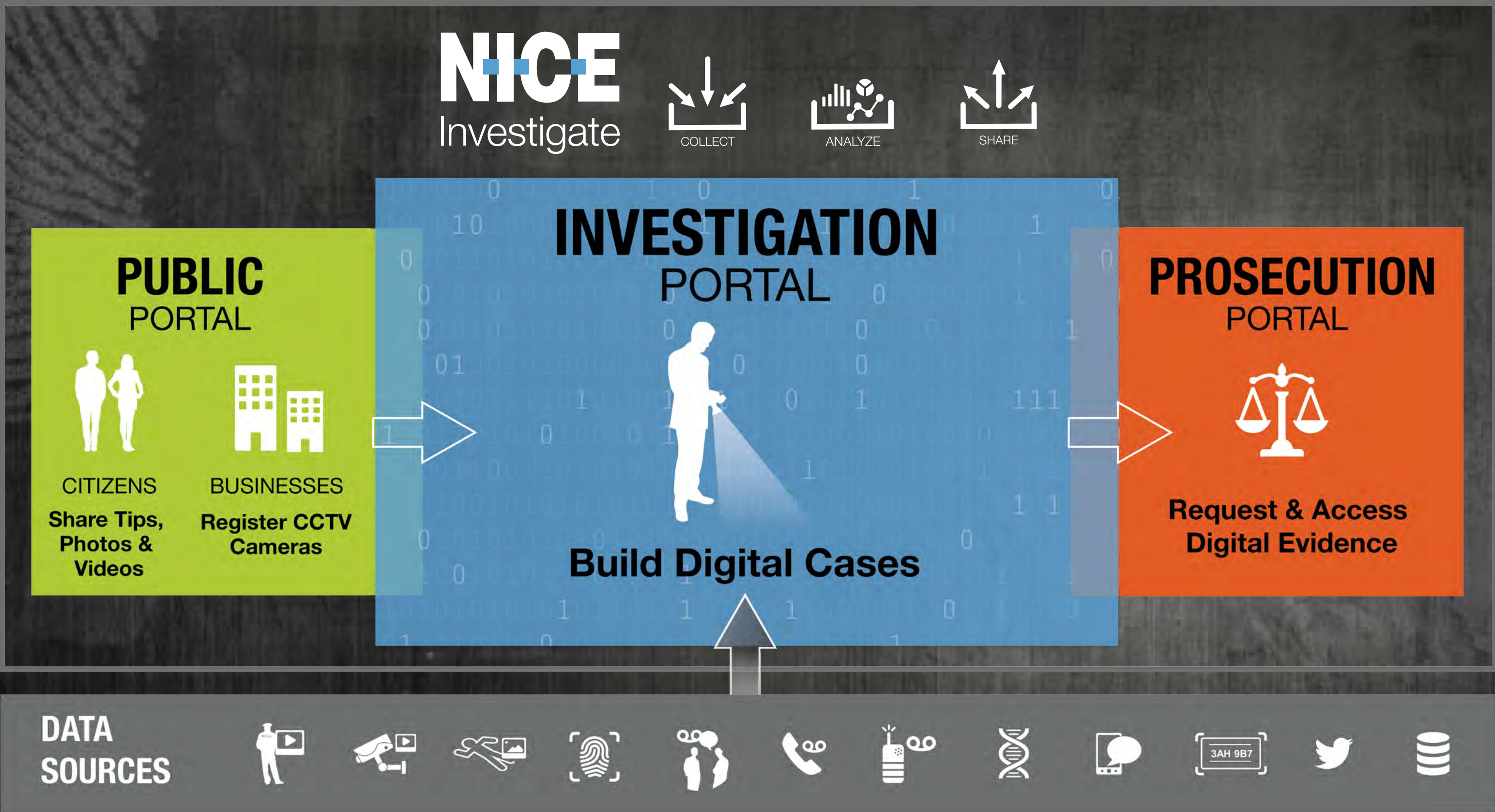
# Introducing NICE Investigate



The NICE Investigate platform was created to solve these and other challenges. It comprises three main application portals: the Public Portal, the Investigation Portal and the Prosecution Portal.

All three portals are accessible via browser so no software installation is necessary.

The Public Portal enables citizens to electronically and securely share tips, photos and video with police departments. It also provides businesses and residents with a virtual place to easily register their private CCTV cameras so that investigators have a better understanding of what available cameras may be within the area of an incident.



The Prosecution Portal makes it easy to securely and electronically share entire cases or specific items within a case with others outside the PD such as District Attorneys, as well other agencies, saving investigators' valuable time.

The primary portal is the Investigation Portal. This is where investigators will collect, analyze and share evidence and build their cases. By putting them in control of the evidence, it makes investigators more efficient and effective crime solvers.





# Solving the Data **COLLECTION** Challenge



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

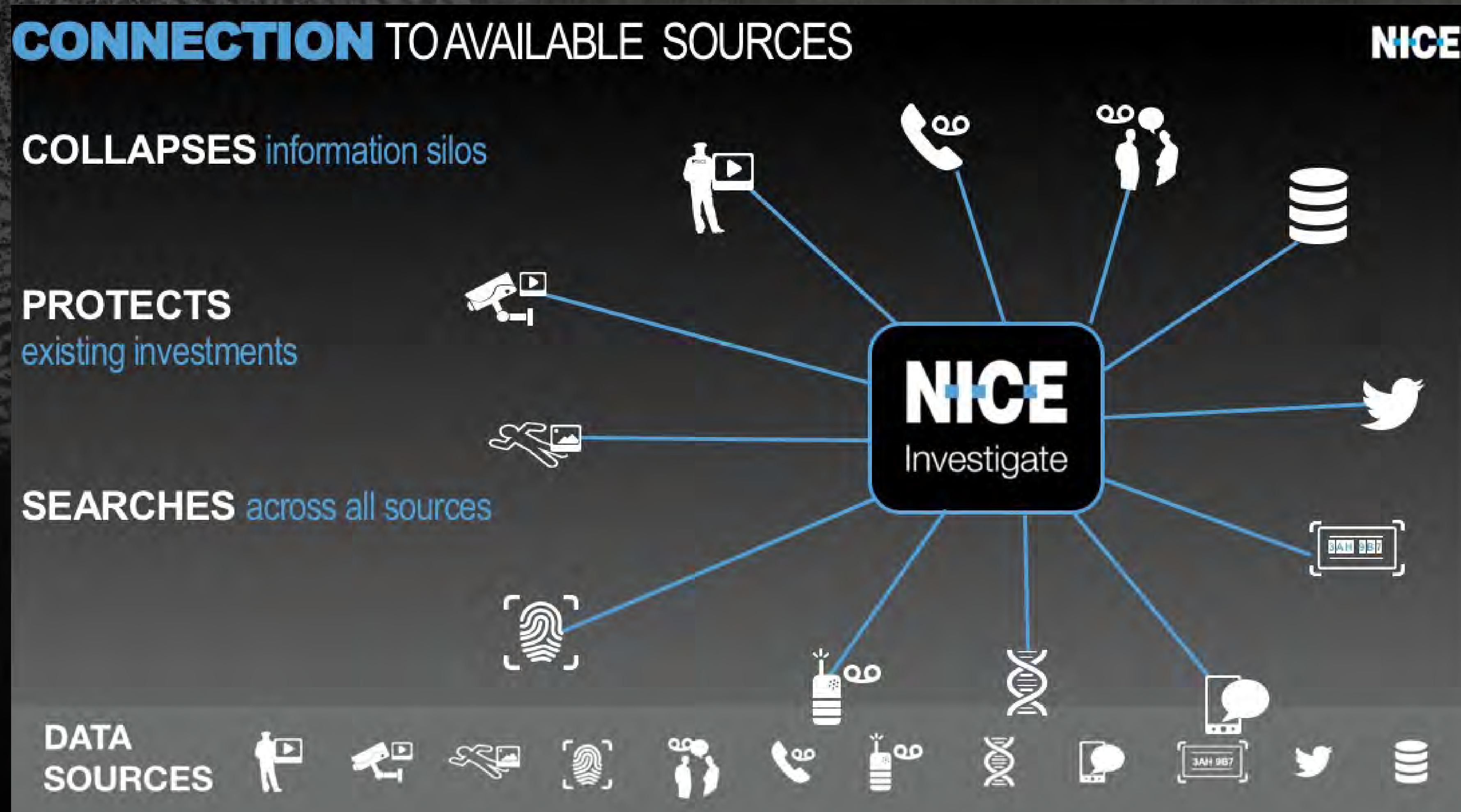
23





# Connection to Available Sources

NICE Investigate integrates content from most existing applications and sources into a virtual case folder including 911 audio recordings, CAD systems, RMS systems, body-worn cameras, CCTV cameras, license plate readers (LPRs) and in-car video as well as interviews, physical evidence, photos, documents, information from digital devices, social media and other publicly-available content.



Because it connects to each of these sources, **NICE Investigate enables a powerful search capability across all of them including structured information from databases and unstructured information from narratives such as CAD comments, incident reports, FI cards, even text from reports and documents.** NICE Investigate also provides Content Analytics on media files so that they can be searched along with all other connected databases and documents.

# Solving the Data **ANALYSIS** Challenge



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

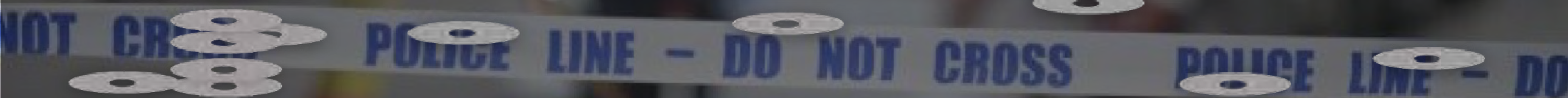
20

21

22

23

Today, most investigators continue to build and manage a physical case folder to hold any paper reports and USB drives and DVDs of video and audio recordings.





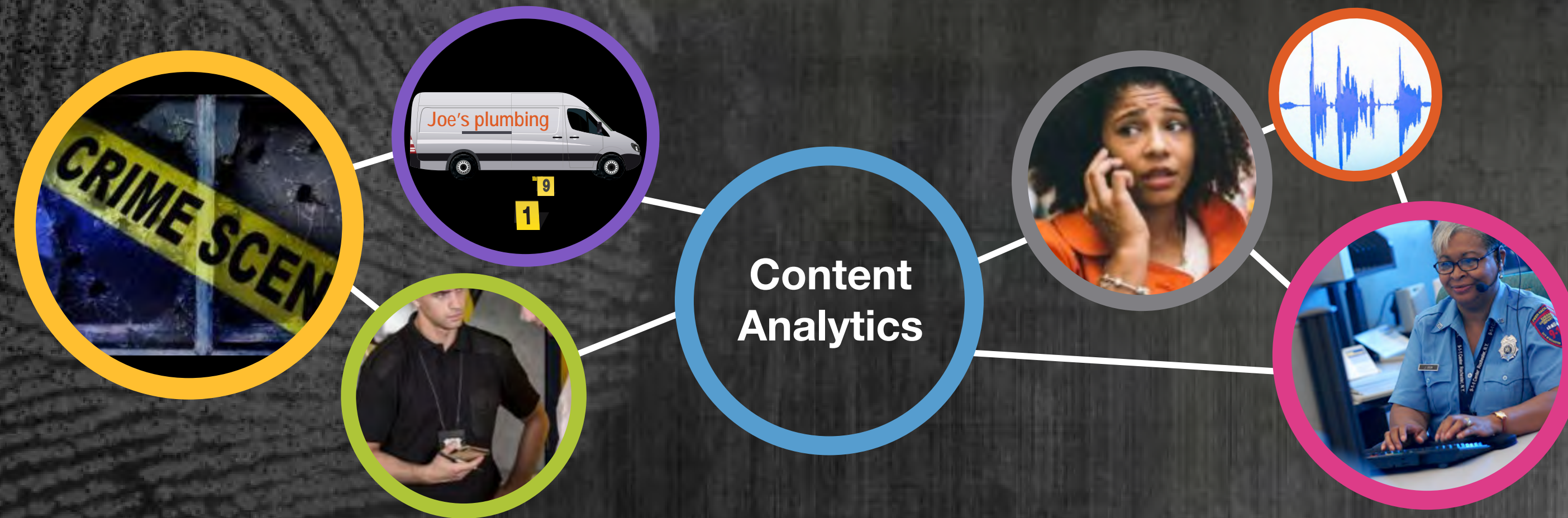
The relevant evidence investigators have is fragmented, making it difficult to organize, put into context and pull the right pieces together to form the **who, what, where, when and why of a case**. They may not even be able to tell what evidence could be missing and few tools are available to help them uncover connections between cases, people, vehicles, etc.

**But how to put it into context?**

**OR FIND WHAT'S MISSING?**

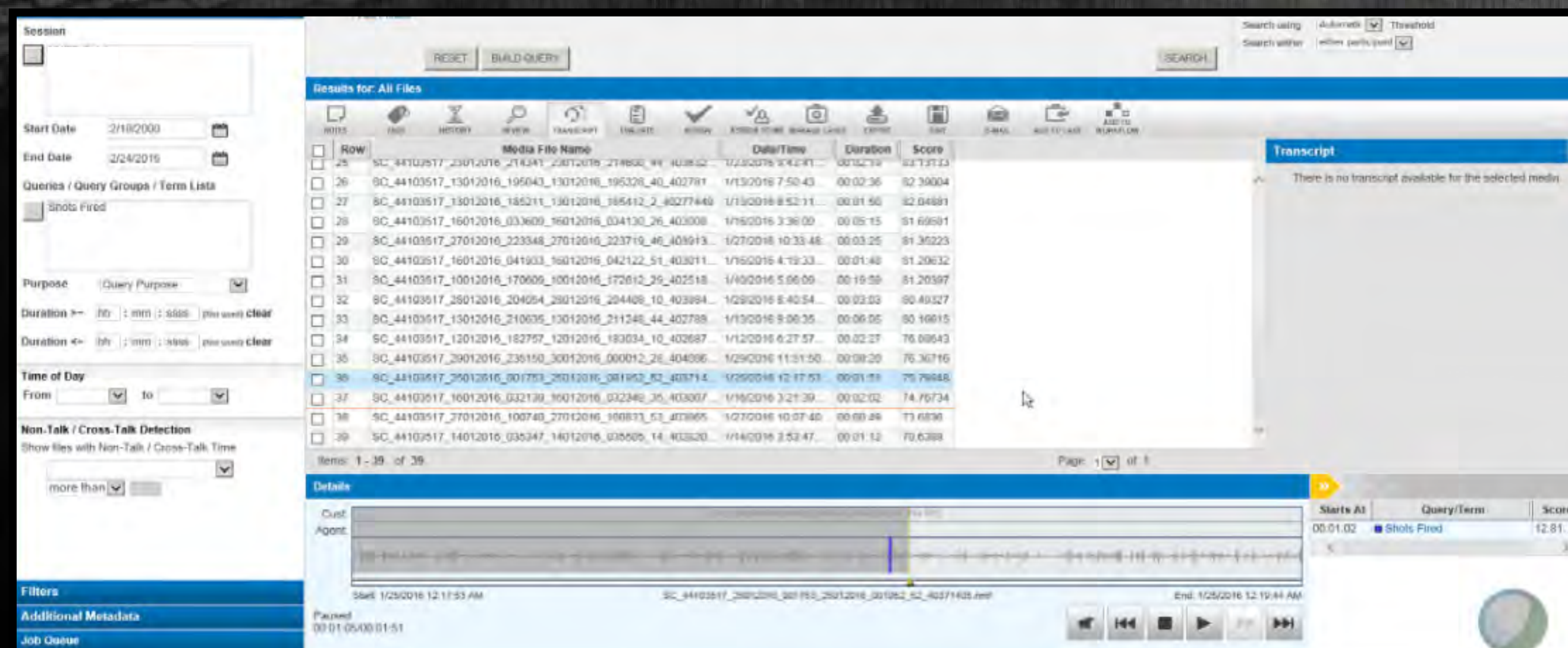
# Using Content Analytics to Uncover New Insights

Above and beyond simplifying access, NICE Investigate is able to search across all connected systems and recommend evidence that is potentially relevant to the case. Content analytics provides investigators the ability to search audio and video files in addition to documents to uncover new insights to help solve cases faster.



Here's an example that demonstrates how NICE Investigate's Content Analytics can help detectives more effectively analyze evidence.

Let's say, for example, a witness in a homicide investigation said they saw a panel van with "Joe's Plumbing" written on the side, fleeing the scene. By adding "Joe's Plumbing" to a key word search, all connected sources – from incident reports in CAD to tagged crime scene photos or witness statements would be searched for the words "Joe's Plumbing." In addition to searching documents and databases for key words, the NICE Investigate platform can analyze audio and convert it to text to make it searchable, so for example, 911 calls, interview room recordings could be searched for the words "Joe's Plumbing" as well.

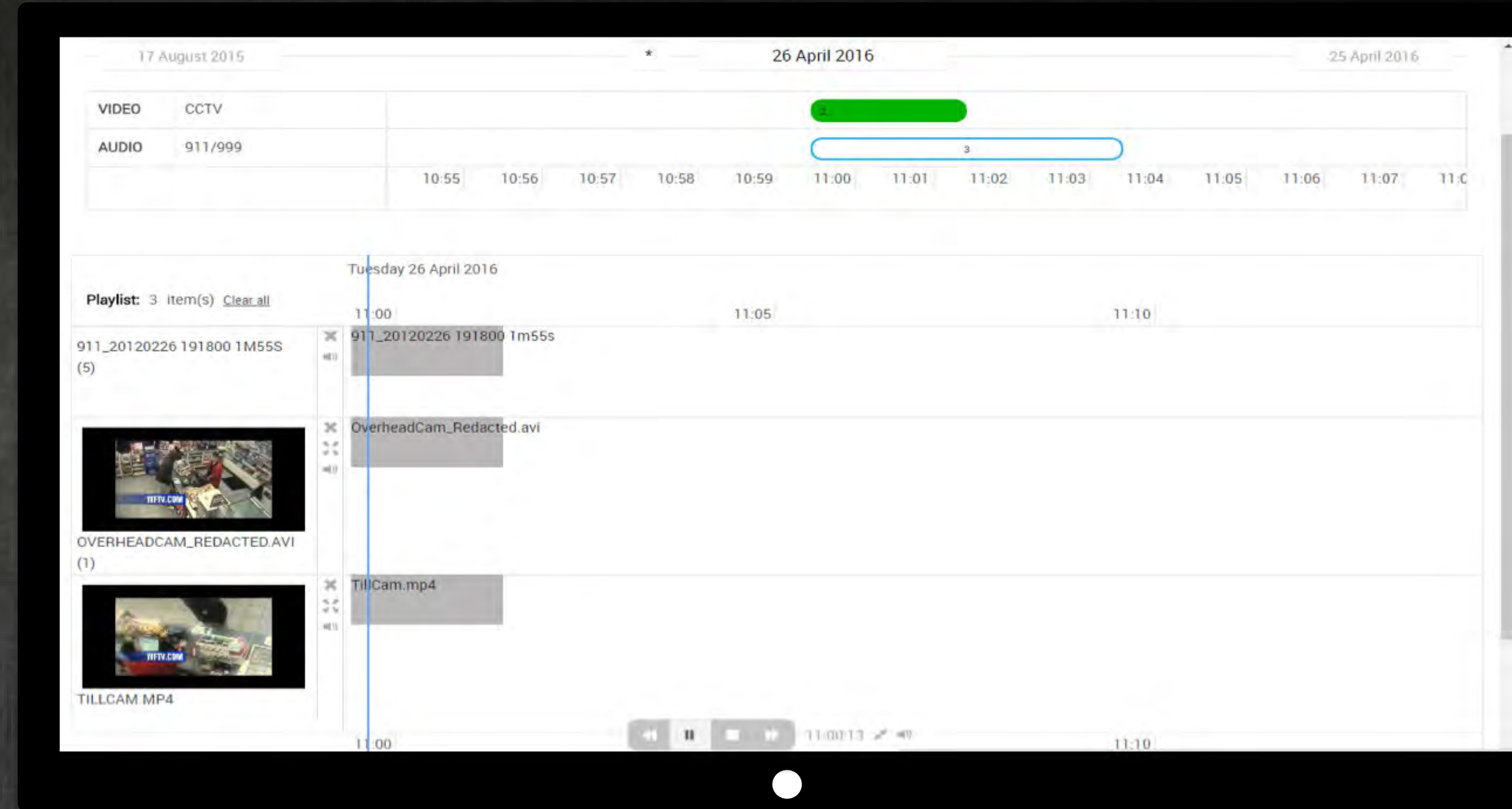




# Putting Evidence into Context: Timeline View

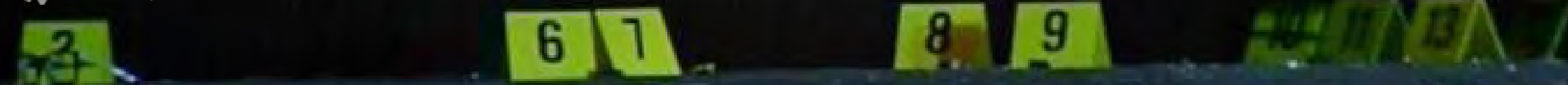
Investigators need to accurately reconstruct incidents using all collected evidence to understand the sequence of events and often to narrate it for their chain of command or possibly to the DA or the DA to a jury.

Given the various different media types and incompatible video and audio formats involved, detectives or DAs often have to switch between disks with different evidence on them or spend hours editing, clipping and even building their own presentations.



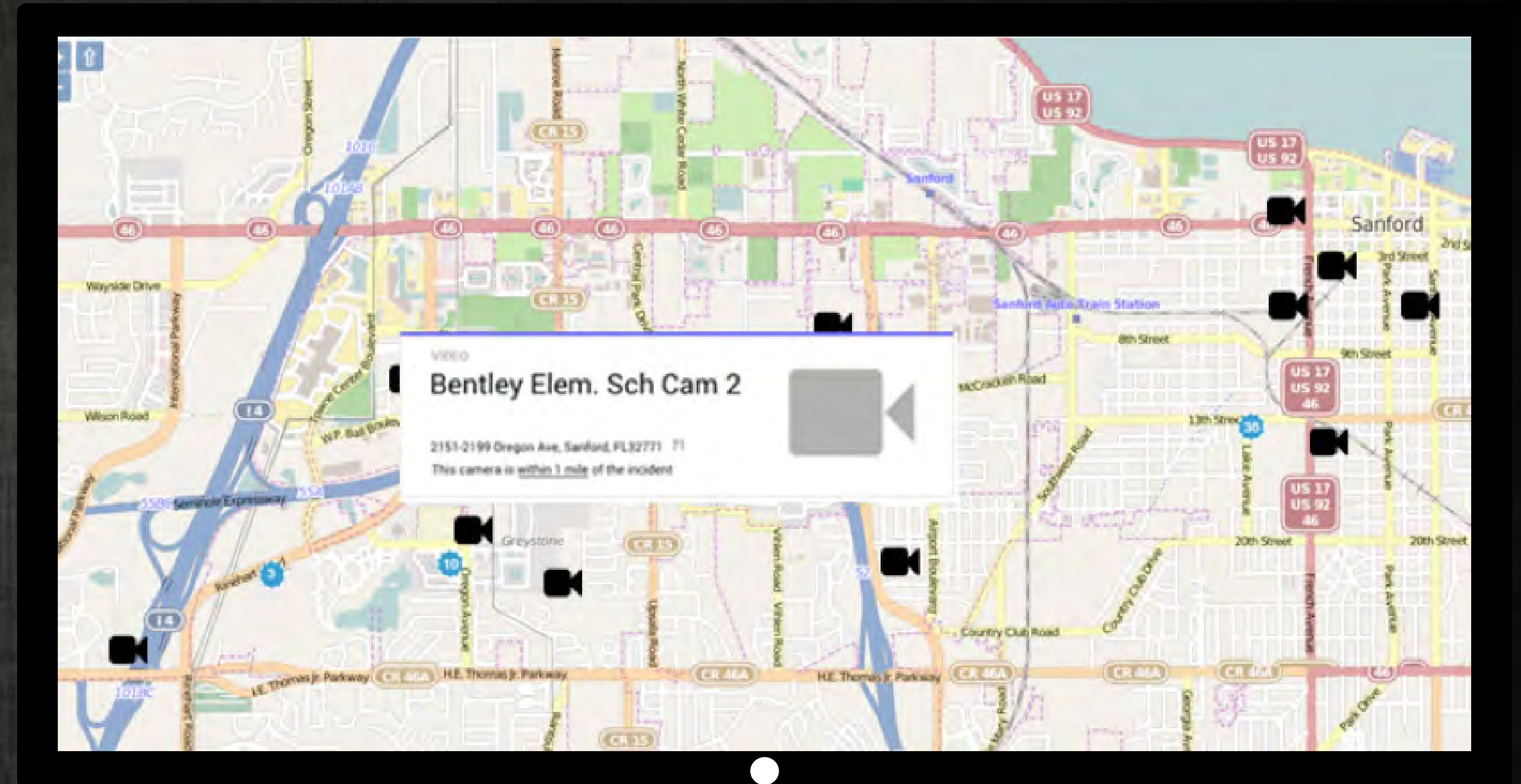
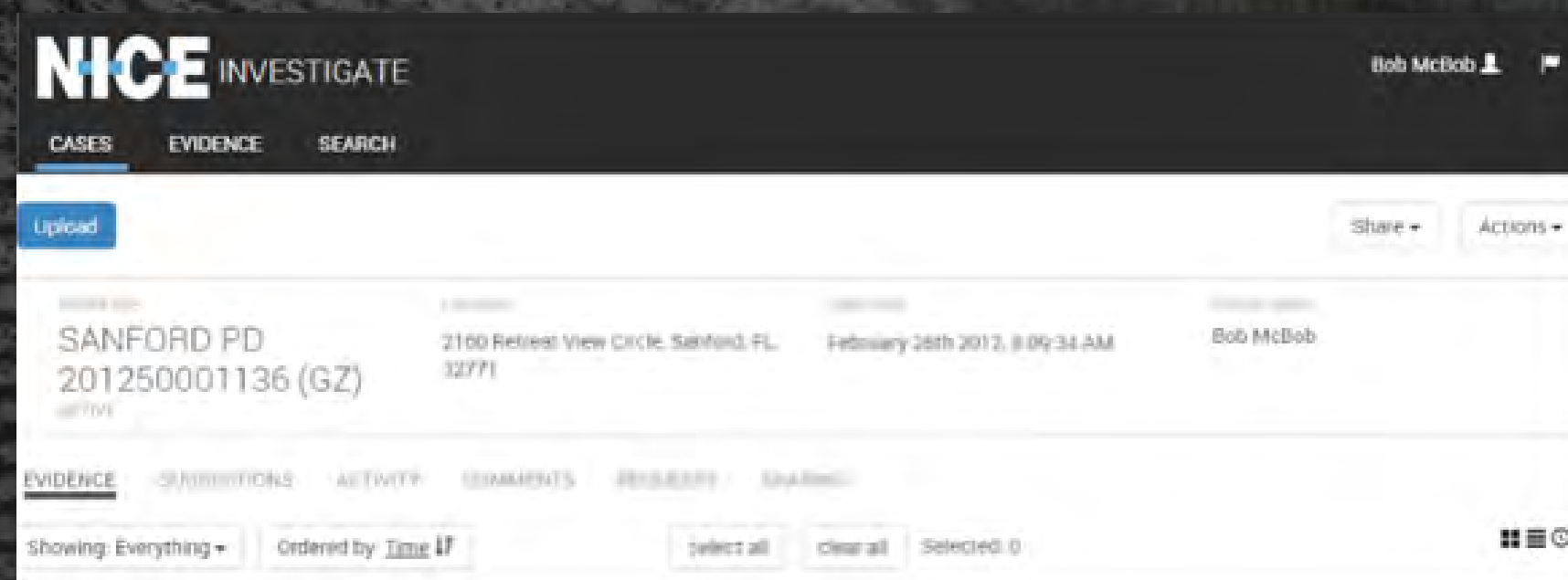
**NICE Investigate lets detectives or DAs select multiple media files within a case including CCTV video, body-worn video, in-car video, 911 audio, radio audio, even photos and videos from citizens to be included in a timeline playback tool that enables them to simultaneously play files from different sources and formats.**

For example, a detective working on a convenience store robbery gathers CCTV video from inside the store and from an ATM camera across the street along with 911 calls indicating shots fired. Understanding what happened outside the store as the suspect entered, what occurred inside, and again what happened outside as the suspect fled the scene – all are instrumental to an accurate reconstruction of events.



# Putting Evidence into Context: Map View

Another powerful analysis tool is the platform's built-in mapping and geo-location capabilities. In this example, an investigator is viewing all the collected evidence within a case and seeing it geo-located on a map view.



The investigator can see layers of additional sources of potentially relevant information, such as ALPR reads and nearby CCTV cameras.



# Solving the Data **SHARING** Challenge



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

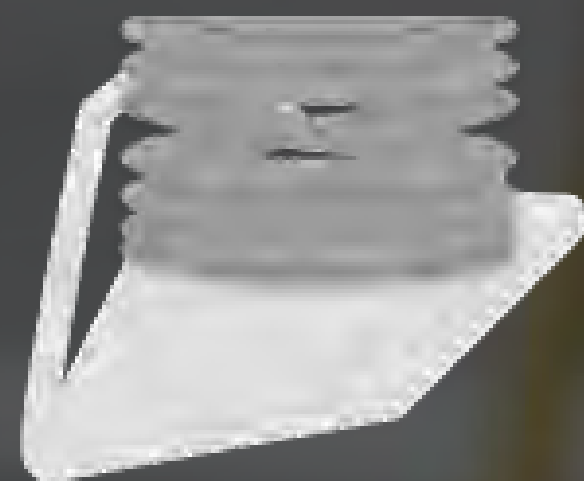
21

22

23



Delivering a stack of DVDs to prosecutors and expecting them to make sense of it all



Today for many PDs, sharing evidence is a very manual, time-consuming process. The task of duplicating the reports and files on USB drives and DVDs within a case folder often falls to the investigating detective when the time comes to share the case with the prosecution. Once copied, typically the detective delivers the physical package to the DA's office.

**With NICE Investigate, sharing is simplified, whether an investigator is sharing a single item or a few items within a case with another agency they are collaborating with or an entire case being shared with a DA. Once a detective has selected the recipients, NICE Investigate generates an email letting them know Detective Jones has shared a case or a portion of a case with them.**

They then log in to the secure prosecutor portal and benefit from the same user experience and visualization tools as the detectives have to view and understand what was shared. The system automatically tracks who has accessed the specific files and when, and whether the evidence has been modified, ensuring evidence integrity and admissibility in court.



# Delivering a Compelling Story

Assembling evidence into a timeline and putting it into a larger context is what makes it compelling. The ability to connect the dots and reconstruct events as they actually happened is vitally important to the jury's understanding of a case.

*Both the prosecutor and the jury benefit from being able to see the big picture by viewing all of the evidence in its proper context, leading to more successful prosecutions.*



# Next Steps

Get a demo/Contact us  
[Psinfo@nice.com](mailto:Psinfo@nice.com)

Check out [www.digital-policing.com](http://www.digital-policing.com)

