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## Highlights

- Protect privacy and help meet compliance requirements with automated redaction
  - Develop investigative leads using people-search characteristics and facial recognition to mine video data
  - Eliminate hours of video review time through meta tagging and fast retrieval of incident videos
  - Save time and headcount with video analytics
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# Capture more value from body-worn camera video

## *IBM Intelligent Video Analytics on Cloud*

### A universal question

Many law enforcement agencies are coming face-to-face with the question, “Should we be equipping our officers with body-worn cameras?” A recent U.S. study states that 95 percent of large police departments have either committed to using body cameras in the future or have already completed their implementation<sup>1</sup>.

Why are agencies moving in droves to implement body-worn cameras? One major reason is public demand for increased police transparency, which has led to a greater emphasis on community relationships. Police departments have implemented body-camera programs to achieve greater accountability for both officers and citizens. Wearing these cameras can result in a reduction of use-of-force incidents by the police as well as protect officers from frivolous complaints from citizens. Other reasons for the growing adoption of body-worn cameras are their ability to collect video evidence for use in investigations, as well as usefulness in training exercises.

The New York City Police Department is piloting a massive body-worn camera program and beginning to deploy cameras this year. If they decide to fully implement an estimated 5,000 body cameras, and an officer’s camera is assumed to be on for an hour and a half per shift, the program has the potential to generate 7,500 hours of footage per day at full capacity<sup>2</sup>.

Clearly, the headcount required to review, analyze and report on this footage is not feasible to sustain or even employ. Whether your agency has implemented a body-camera program or is still in discussion on the topic, the roll-out of the cameras is just the first step. Utilizing the footage captured by these cameras in your investigations is where the value truly lives.



What are law enforcement agencies to do when faced with the mounting pressure to provide greater transparency via cameras worn by officers, combined with the labor and logistical resources necessary to account for all of the cameras and their resulting footage?

The key to unlocking value from footage captured by body-worn and vehicle mounted cameras, while freeing up the efforts of your analysts, is automating much of the search process with video analytics for body-worn cameras. There are simply not enough hours in a day, or analysts on staff, to search, document and properly distribute footage for public consumption and investigative leads.

### A better way to work

IBM® Intelligent Video Analytics on Cloud is leading-edge video analysis technology for footage captured by body-worn cameras, so your agency never has to worry about being out-paced by crime. The solution is available on Microsoft Azure Government Cloud as well as other cloud platforms where many agencies are already storing their video footage. In a cloud environment, the analytics software application will receive automatic push updates with the latest releases and new analytic algorithms. As video analytics technology continuously evolves to stay ahead of crime and provide greater value for you and your agency, you will always have the latest version at the ready.

Additionally, the cloud provider maintains and updates the overall system security. This means your department will require less employees with technical skills to manage the system's operations, allowing you to place more officers on the street.

### Arming the analysts

#### Easy retrieval and redaction

Agencies using Intelligent Video Analytics on Cloud benefit from the ability to easily and quickly retrieve specific frames or sets of footage. By allowing for meta-tagging or the ability to index the video footage, the solution enables quick retrieval and redaction of footage to meet privacy and compliance requirements and assist investigations.

Redaction allows agencies to ensure that footage for public release complies with privacy and criminal justice laws. The public and media have increased the call to release footage for police transparency. Intelligent Video Analytics on Cloud can help agencies be prepared to answer that call with configurable redaction criteria that enable automatic distortion of sensitive images captured by an officer's body-worn camera.

Auto-redaction reduces the number of hours needed to manage, review and manually redact body-camera footage for public consumption. This can result in significant financial savings for agencies by eliminating need for increased dedicated headcount. The Intelligent Video Analytics on Cloud solution allows users to:

- Redact selected faces for a specific segment
- Redact all faces
- Redact all pixels
- Manually redact any content in a single frame
- Set auto-redaction parameters to eliminate need for repetitive manual redaction

#### People search

With this functionality, you can efficiently develop tactical leads by auto-searching footage for a set of user-defined characteristics, such as age, gender, ethnicity, facial hair, hair color, clothing type or colors and patterns and skin tone. These search parameters can be applied to footage across multiple cameras for an even quicker and more comprehensive review. Intelligent Video Analytics on Cloud eliminates hours of footage review to quickly provide evidence to officers in the field and make the most of every second during an active investigation.



Figure 1: Officer making a traffic stop



Figure 2: Caption: Object detection and tagging

### Facial recognition software

The Facial Recognition component is an optional feature to the Intelligent Video Analytics on Cloud solution. Law enforcement agencies can load or enroll a set of facial images representing potential people of interest into a watch list application and the analytics software will automatically compare these images with faces captured by cameras worn by officers. The facial recognition component detects high-quality matches and flags these matches to be reviewed by an analyst. Analyst-confirmed matches are then sent to the IBM Intelligent Video Analytics on Cloud system as a recognition alert. This process can take a matter of minutes, rather than the hours previously needed to review all footage and manually cross-check with all people of interest related to an investigation.

### Finding a partner against crime

As your agency either rolls-out or considers implementing a body-worn camera program, it is essential to have a suitable partner in your fight against crime who can provide the most comprehensive analytical tools capable of transforming these cameras into a valuable informant for all investigations. IBM has decades of video technology experience with clients across multiple industries, combined with the power and insight of dedicated video analytic researchers. Analytics for body worn cameras is part of a growing family of solutions keeping pace with the ever-increasing video data available today.

### For more information

To learn more about IBM Intelligent Video Analytics on Cloud, contact your IBM representative or IBM Business Partner or visit [ibm.com/law-enforcement/](http://ibm.com/law-enforcement/).



Figure 3: IBM Intelligent Video Analytics on Cloud



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- 1 Survey: Almost All Police Departments Plan to Use Body Cameras (<http://www.governing.com/topics/public-justice-safety/gov-police-body-camera-survey.html>)
- 2 NYPD Ready to Hit Record on Body Camera Pilot Program (<http://www.ny1.com/nyc/all-boroughs/news/2015/08/27/nypd-ready-to-hit-record-on-body-camera-pilot.html>)



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