

CASE STUDY: Blueforce Development

Arming Response Teams With Mobile Streaming



In hazardous work environments and military operations, timely delivery of information can be a matter of life and death. The **BlueforceTACTICAL** mobile app recently launched the Wowza Streaming Plugin to equip frontline users with live-streaming video integrated with location, incident collaboration, and sensor fusion — all via their smartphone.

CHALLENGE

- Create **low-latency streaming** bodycams for use in military and hazardous environments.
- Deliver stream analytics tools and a suite of cognitive services.
- Minimize equipment complexity and ensure quick adaptation.

SOLUTION



OUTCOME

- Achieved sub-2000 millisecond latency, with 500 millisecond latency to be offered in the near future.
- Increased speed of command on the front line.
- Deployed the platform as a mobile app requiring no additional equipment.



Designing Technology to Transform the Defense Industry

Streaming isn't just for Netflix. It also plays a key role in military operations, law enforcement, emergency response, and occupational safety. Today, these emergency scenarios involve onsite and offsite individuals communicating in real time. But how can agencies ensure speedy and accurate collaboration when it matters most?

Michael Helfrich created Blueforce Development in 2005 to enable real-time information sharing that goes beyond radio communication. Closing the gap between team members and commanders required conveying the immediacy of a specific situation through all means possible.

"Just-in-time streaming video is one of the major requirements for rapid decision-making as commanders and responders can go 'eyes-on' and truly see what's going on," explains Helfrich. "Location is good. Awareness of the surrounding is better. But seeing is believing."

Mobile Streaming With Machine Learning

Minimizing video lag is always a priority. For these mission-critical applications, survival depends on it. While streaming has been around for some time, delivering live video across the world from the back of a Humvee has not. That's why latency and portability are key when it comes to video communications in high-risk situations.

Blueforce Development has used Wowza to deliver streams from a host of connected platforms for years — including canines, unattended ground sensors, robotics, unmanned aerial vehicles, and more.

More recently, Blueforce announced the **Wowza Streaming Plugin for BlueforceTACTICAL**, which provides end users with a bodycam solution that runs on mobile devices. Medical operators on the battlefield and special ops teams on reconnaissance missions can now deploy video streams hands-free — without the need for additional equipment.

The app supports location sharing, sensor fusion, and incident collaboration. Streams can also be integrated with a suite of cognitive services such as facial recognition, object identification, and character recognition (e.g., insignia, signage, written word).

Solving for Latency

Rapid deployment of information means the difference between life and death at Blueforce Development.

When timely video delivery is a matter of employee safety, Wowza and Blueforce development take care of business. This technology is now readily available for the many industries that rely on it — ranging from fire responders to workers in hazardous environments.

"With Wowza, the price is right, stability is very good, and documentation is fantastic. I have been able to find tech notes for nearly every question I have had," says Helfrich.

Because BlueforceTACTICAL takes the form of a mobile app operated on users' devices, new capabilities can be added in a matter of days. That way, the platform will continue to secure front-line responders and secure need-to-know information — now and in the future.

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To learn more about how others are using Wowza streaming technology, visit [wowza.com](https://www.wowza.com).