

CASE STUDY: MDOT

MDOT Looks to Wowza's Streaming Engine to Upgrade Video Systems



CHALLENGES

- Finding a cost-effective way to broadcast a rapidly growing amount of video traffic information.
- Being able to provide video traffic information to a wide customer base with a variety of receiving platforms and devices.
- Finding a cost-effective solution to struggling communications and equipment infrastructure.

SOLUTIONS



OUTCOMES

- Expanded traffic camera footprint by 16x with an economical solution.
- Implemented streaming technology capable of reaching users across all platforms — from Windows computers to Apple handheld devices.
- Simplified video distribution and reduced amount of equipment.

OVERVIEW

The Mississippi Department of Transportation (MDOT) has a network of nearly 400 cameras throughout the state that provide a constant view of traffic conditions. This live video travels from the cameras to the traffic management center where it is disseminated to various internal points. MDOT also sends video out over the internet so anyone — from first responders and emergency operations centers to the average driver — can keep an eye on traffic conditions through MDOT's traffic portal, mdottraffic.com.



Recently, mdottraffic.com expanded from 25 to nearly 400 traffic cameras across the state. They continue to add cameras to the system to the present day. MDOT's intelligent transportation system (ITS) communications network — made up of state-owned fiber-optic cable, leased lines, and wireless infrastructure — was struggling to keep pace. Furthermore, the prospective hardware needed to support this tremendous growth was exceeding available budgets and stressing already overcrowded equipment rooms. Intelligent transportation systems like MDOT's typically use multicast transport rather than servers to distribute video. However, because of some issues peculiar to Mississippi, multicast was not a viable option. Not only would multicast transport be expensive, at roughly \$40,000 per installation, it would also require additional energy and space. Furthermore, the video images would be available to only a few views under limited bandwidth conditions.

As a result, MDOT was restricted in how and where it could share video images with the traveling public. And as the system load grew, it was becoming increasingly difficult to provide full-resolution images. They decided to look elsewhere for an answer, finding Wowza.

"We've been able to simplify the distribution of our video, and have more reliable, higher-quality video with less equipment."

- Timothy Bean, ITS systems specialist for MDOT

WHY WOWZA

- Wowza Streaming Engine is the more economical option to multicast, as well as other options.
- Wowza Streaming Engine is capable of streaming all of MDOT's cameras over the Internet to any platform in full HD IP video. These platforms and devices include Linux, Windows®, and Mac®, as well as to the world's leading video-friendly mobile devices.
- Wowza Media Systems offers a single-server platform reducing enterprise expense by simplifying personnel training, operations, and minimizing space.

BENEFITS & RESULTS

- With Wowza software, MDOT can distribute video to any platform on any device allowing untold amounts of traffic information and its benefit to be disseminated quickly, efficiently and affordably.
- With Wowza Media Server a unicast is possible, which eliminates the effort of encoding, decoding, and then re-encoding signals.
- Wowza Streaming Engine enables anyone with an Internet connection to see all available video images, whether on a computer screen or a "video wall" in a command center, without making costly investments in additional equipment or communication.
- Implementing Wowza Streaming Engine takes less than an hour while a multicast solution can take months.



To learn more about how others are using Wowza streaming technology, visit wowza.com or contact sales@wowza.com.

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