

## Application Note - Traffic Monitoring

Traffic surveillance and monitoring systems are progressively moving over from analogue technology to IP based digital video systems. In addition to the improvements in video quality, there is much greater scope for value added services.

This application note highlights one way in which Quorum Stream can be used to extend the usability of digital video surveillance networks.

### **Analogue Technology**

Historically, traffic management video networks have been based on analogue technology. This involves coaxial or optical fibre cables running from each camera to matrix switches at various locations around the network, each carrying one video signal.



### **Digital Networks**

Today, surveillance networks are almost exclusively built on digital technology, and traffic management is no exception.



The bandwidth available across digital network technology (e.g. ATM or Ethernet) means that a single cable can handle multiple high-quality, high-bit-rate video streams.

Monitoring real-time footage of key traffic flows is of interest not just to the highway agencies owning the networks, but to many other third parties:

- Vehicle recovery services
- Parcel delivery companies
- Freight haulage companies
- The emergency services
- The media
- The car-owning public.

Allowing controlled and paid-for access to the video content is a obvious revenue stream.

### **The Internet**

The problems begin however where the dedicated network finishes and the Internet begins.

With its unregulated and heterogeneous nature, the quality of service required for high-bandwidth streaming is just not available.

Data loss, high latency, and data corruption all combine to make the Internet a hostile environment for video streaming.

However, when it comes to a universal access medium, the Internet is unbeaten. Every interested third party will have some form of connection and generally the cost of access is negligible.

## Internet Broadcasting

By using Internet-optimised video streams with a reliable delivery mechanism, it is possible to broadcast to a multitude of clients across the Internet.

With its optimised transcode engine, Quorum Stream can re-encode virtually any high bit-rate video

stream into more Internet-friendly MPEG4 with almost imperceptible changes in quality.

Coupled with its reliable RTSP stream delivery, Quorum Stream is the ideal solution.

The following diagram shows Quorum Stream at the heart of a dynamic and flexible IP network.

