

# **PROMO EYE**

## INTEGRATED OPEN SOURCE SYSTEM OF VIDEO SURVEILLANCE, VIDEO ANALYSIS AND VIDEO PROMOTION

Video surveillance systems, originally designed to enable public and private bodies to monitor areas for security purposes, have gradually evolved towards wider fields of application.

The **new technological solutions for video analysis** point the way to systems designed not only for security purposes but also new modes of video surveillance. Applications could include monitoring the movements of landslides, performed by a camera connected to a broadband network, or promoting remote areas of particular environmental interest, or controlling illegal dumping sites by analysing variations in vehicle loads, or integrating video contents with messages including notifications of events taking place, related information and promotional contents.

#### **AN INTEGRATED SYSTEM**

Based on an analysis of this market sector – public service, urban and environmental security, and promotion – CSP has developed the Promo Eye asset, an integrated system of video surveillance and video promotion which fulfils a range of different needs in a single technology solution. Built on tried and tested open source projects, Promo Eye both centrally manages newly installed IP cameras and reuses non-IP analog cameras deployed in existing architectures, creating a customisable, scalable, low cost platform that fulfils the video monitoring and surveillance needs of public authorities, companies and private individuals.

The video management tools provided by the system enable users to create complete service infrastructures that make rational use of the available bandwidth. The system enables data pertaining to the video flows transmitted by the various cameras to be added, giving users access to added value contents of various kinds: general information, tourist information, promotional messages. A structured access system and a sole administrator interface mean that users can be profiled, giving different levels of access to different profiles. The Civil Protection Corps, for example, will have access to video contents transmitted by cameras located in critical areas, while members of the public will be able to view public service information or promotional messages.





Figure 1 - Video promotion – single administrator interface and promotional message

Figure 2 – INTRUSION DETECTED !! Video surveillance – alert message

## THE MAIN FEATURES

• Interconnected with IP cameras: connected to a broadband network and compatible with the standard video-encoding formats (MJPEG, MPEG-4), located throughout an area and connected to the internet.

• Access to video contents: from the cameras using a centralised web portal, and secure remote access.

• **Simultaneous visualisation of different flows**: default multi-view layouts: mosaic, carousel, grid etc.

• **Continuous recording**: scheduled or on a motion detection basis, by some or all of the cameras in the system.

- Video viewing and export: the videos can be viewed and exported in various formats.
- **User profiling**: access to webcams is tailored to user group.

• **Remote control of cameras**: the operators/users can control the cameras remotely, using the zoom, pan and tilt functions and selecting the view they wish.

### SYSTEM ARCHITECTURE

#### **Flow Collector**

- Extends compatibility to all models of camera and encoding system.
- Inserts related overlays: sensors, adverts, messages, QR codes, tweets.
- Improves the scalability of open source projects by distributing to various physical installations.
- Inserts dynamic fallback images to enable integration of additional information, communications or advertising messages.

#### **Unified WEB interface**

All the cameras in the system can be managed from a single web interface. Each camera can be labelled with detailed information: geotagged, personalised data, user profiling...

#### **Control and monitoring module**

- Verifies the operative status of the cameras.
- Unified management of configurations and contents.
- Manages metadata sources and publication functions.
- Malfunction alerts.



## **VIDEO STREAMING FUNCTIONS**

The system architecture enables a test card or personalised image to be displayed in the event of malfunctions, temporary shutdown or standby, with text overlays that can be customised by the user. The compatible formats are:

- Acquisition: MJPEG and RTSP (H.264).
- Publication: WebM (IceCast), RTMP/FLV for Flash streaming and MJPEG/HTTP.



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