



PAS

MOBILE, MESSAGING & MIDDLEWARE TECHNOLOGIES

Company Name: Camba.tv (Also known as EverCam)

Project Title: Platform to re-direct / transcode video from IP cameras

Funding: Enterprise Ireland Innovation Voucher

Camba.tv, also known as EverCam specialise in security installations using the latest IP & Access Control technology bringing a company's video and data together. EverCam provide conventional single site installations as well as multi-site, software integrated systems providing business intelligence to organisations of any size.



PROBLEM TO BE SOLVED

Evercam wanted to assess the feasibility of applying WebRTC technology to the RTSP stream of IP video camera so that the stream could be extracted from networks with highly aggressive firewalls.



HOW GATEWAY DELIVERED SOLUTION FOR INDUSTRY

The initial work undertaken was to investigate the usage of WebRTC technology which would be added to small hardware computing device attached to an IP video camera. However the general solution in this direction was not proving to be efficient and so a matrix of alternative options for a larger gateway device was created. This matrix included specific requirements such as

- HTTP Tunnelling
- RTSP Tunnelling
- Admin access to the camera's HTTP Interface (this is a certainty with regard to actual HTTP. However as was seen on the Hikvision, embedded components will behave very differently. So for example it was confirmed that the Hikvision player tries (by default) to establish a UDP-based comms with the camera and this causes unpredictable behaviour in the control panel. We needed to play around with this to figure out how big a problem it will be.
- Admin access for evidence retrieval from camera / network video recorder.
- Peer to Peer streaming of video where possible

Given these requirements the Evercam development were able to construct a working proof of concept, with guided assistance from the TSSG on its configuration.

By provide SDN Framework (software based deliverable) Prepareing scripts to demonstrate SDN capability (software based deliverable) Creating control logic that would exploited SDN features(namely security and traffic isolation functionally) Producing a Technical Report on SDN framework



IMPACT FOR THE COMPANY

From an overall perspective the solution provided to Evercam achieved the overall goal of the innovation question which was to allow IP video cameras installed by EverCam to stream its video content to the Evercam cloud service even in networks with highly aggressive firewalls. They were able to test this through a working proof of concept, which was built by the Evercam development team, and allowed them to demonstrate this functionality to exiting clients and to new potential customers.