WaveStream

For surveillance applications, image compression is primarily used for real-time transmission and storage. As technology progresses, the market is demanding higher framerates as well as higher resolution video, primarily intended for transmission over LANs and relatively high-speed WANs. High fps and high mega pixel video means more detailed pictures, but it also means the cameras will need more bandwidth and storage. Hence for technology leading brands like Wavesys, it is a challenge to work on increasing camera resolution and frame rates while also focusing on reducing the bandwidth and storage requirements. By the end of the decade it appears inevitable – the standard CCTV system will be pure IP-based. IP cameras will deliver video at high framerates (30-50 fps) and at higher resolutions (4K or 12MP) over LANs and WANs to video management systems and storage systems. It will be critical that the video is dual-streamed, one running at a high bandwidth, the other for remote monitoring at a lower one.

Wavestream works with both H.264 and H.265 compression techniques and uses smart dynamic object & motion-based algorithms to analyze the video stream on the fly and identify what's really important. The redundancies are reduced without compromising the video quality.

The main features of Wavestream are

- Advanced algorithm-based compression to compress files that have long distance redundancies
- Effectively manages compression optimizing colour codes, group of pictures, bit rates and motion
- It finds and encodes large chunks of duplicated video data and compresses it using advanced computer algorithm to reduce storage
- Wavestream reduces storage by 5% to 20% depending on conditions over and above H.264/ H.265 compression