Video Compression for areaDetector

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ADVideoCompression

- EPICS IOC interfaces to libavcodec, which handles variety of codecs

- areaDetector frames sent to libavcovec context object, compression is controlled by interface functions, then packets are broadcast via PVAccess

- Each packet corresponds to a frame but compression is not frame-level because preceding packets are also used in reconstruction.

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Decompression

- Compressed video packets broadcast by PVAccess can be decompressed by an ImageJ plugin that was developed

- Java wrapper to ADSupport C functions like existing areaDetector decompression plugins

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Future plans

- Performance testing needed to compare with existing compression methods

- Approval to make video compression/decompression plugins open source

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