This is a customized version of FFmpeg 3.4.2 which serves as a back end for native <https://github.com/ric-sv/segment.generator.ffmpeg> segmenter server.

The following sources have been modified:

* libavformat/segment.c (segment muxer)
* libavformat/avformat.h

This standalone build should produce a set of static Ffmpeg libraries for RPi0 target. Native build of segment.generator.ffmpeg needs to include these libraries in gcc/g++ link options.

Building ffmpeg libs

Initial commit of the tree is a clone of cross-compile build configuration. Detailed instructions on how cross-build the libraries on Debian VM host and/or to build them natively on RPI0 will be published later.

Under the hood

Modified segment muxer calls back the segmenter app at the end of each split and sends along the required data. The callback functions are implemented in the segmenter app, and they are registered with muxer when the app initializes ffmpeg infrastructure.

New ffmpeg copy segment muxer splits the incoming MPEG-TS stream into short TS segments. Actual segment duration depends on camera exposure mode. Internally each segment represents a GOP cut from a source TS at I-frame boundary. Each segment starts with an I-frame, and the rest of the frames are P-frames.