## **Building OpenCV with MediaSDK support**

- 1. Install MediaSDK
- 2. Make sure corresponding environment variable is set, Windows: INTELMEDIASDKROOT, Linux: MFX\_HOME
- 3. Build with <code>-DWITH\_MFX</code> option turned on:

```
cmake -DWITH_MFX=ON <path-to-opency-sources>
cmake --build .
```

## **Decoding**

Media containers are not supported yet, so it is only possible to decode raw video stream stored in a file. It can be extracted from a container manually using the FFmpeg tool (<u>source1</u>, <u>source2</u>) or any other tools:

```
# H264
ffmpeg -i video.avi -vcodec copy -an -bsf:v h264_mp4toannexb video.264
# H265
ffmpeg -i in.mkv -c:v copy -bsf hevc_mp4toannexb out.h265
```

Then you can use VideoCapture object to decode the resulting file:

```
VideoCapture cap("video.264", CAP_INTEL_MFX);
```

**Note!** The file extension is important, because it will be used to <u>determine</u> the codec. It can be one of .264, .h264, .mp2, .mpeg2, .265 or .hevc.

## **Encoding**

Use the VideoWriter object:

```
int fourcc = VideoWriter::fourcc('H', '2', '6', '4');
VideoWriter writer(filename, CAP_INTEL_MFX, fourcc, fps, frameSize, isColor);
```

Where fource can be one of  ${\rm MPG2}$  ,  ${\rm H264}$  ,  ${\rm X264}$  ,  ${\rm AVC}$  ,  ${\rm H265}$  or  ${\rm HEVC}$  .