H.264 vs VP8 Video Comparisons

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v4

Video to download

Download these two video and see how you think they compare. Don’t watch them on the dropbox site as it does funky things in it’s playback.

- Video A: https://dl.dropbox.com/u/17089001/VidComp/a.mov
- Video B: https://dl.dropbox.com/u/17089001/VidComp/b.mov

Bit of Fun?

Video A

Video B

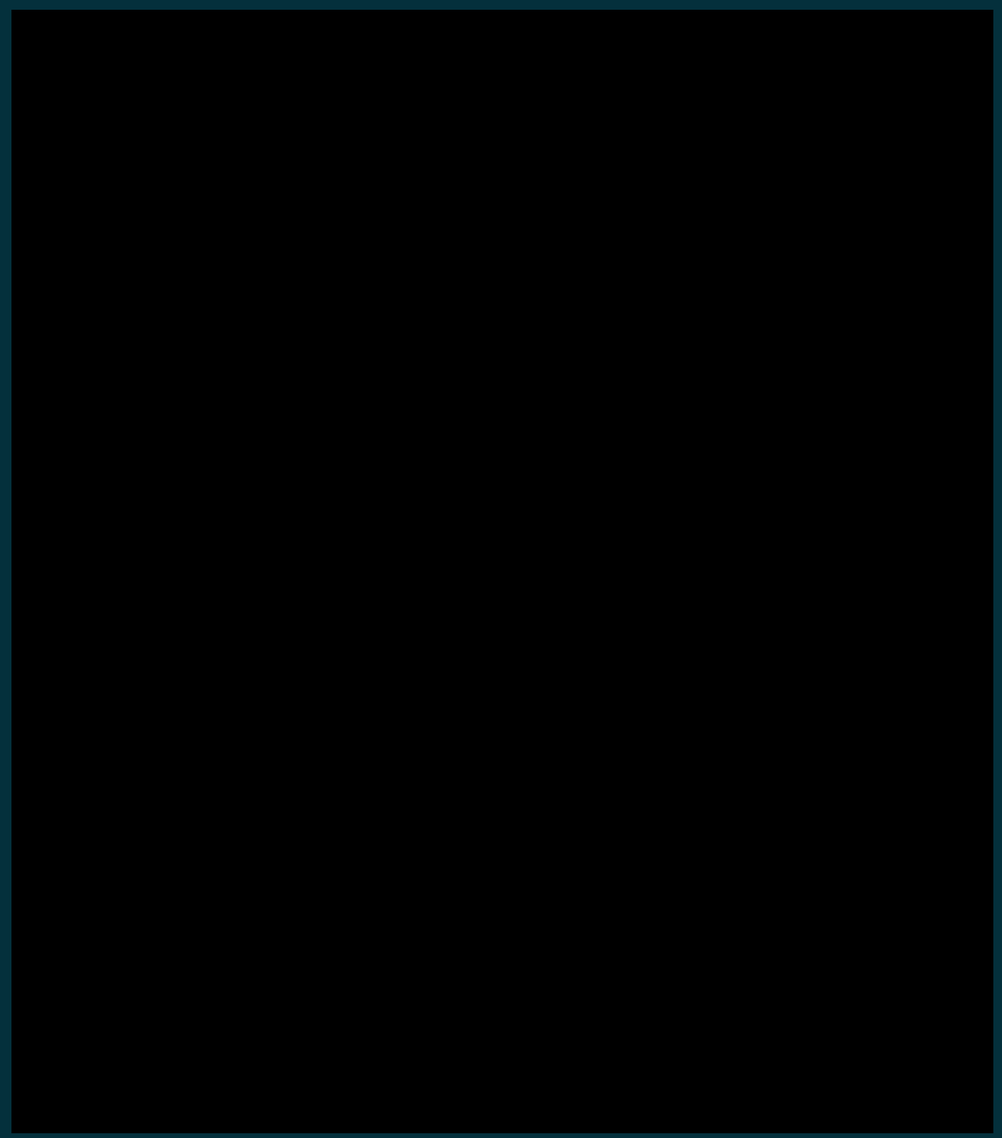
Approach to Testing

- Many ways to deliberately or accidentally seriously bias video codec comparisons
- Hard to choose values for the many parameters that can be set
- End the end, the User Experience (UX) is what maters
- I have used “best of breed” products to try and show what an end user would see
- To save time, showing good VP8 implementation in best of conditions (Desktop, no bandwidth limits) and good H.264 implementation in difficult conditions (Mobile, limited bandwidth)
  - VP8: Chrome mac air to Chrome on fast desktop
  - H.264: Facetime on iPhone to Facetime on fast desktop

Test Setup

- Video shown here is cropped to allow it to be large enough to see anything on these projectors.
- Original pre-crop is on dropbox site if anyone wants to look at it but where sized to have person taking up same portion of image and be as close as possible to same amount of motion, changing pixels, etc.

Complaint #1



- “Hardware codecs are just way better than software and not fair to compare”

Complaint #2

- “Quality is close enough it does not matter and cost of patent is the important factor”
- Actual cost for major browser vendors for H.264 is low
- Cost for people doing less than 100k units of H.264 is likely zero
- Risk of VP8 is considered by some to be substantial

Complaint #3

- “But this is not constrained baseline”
- This is what you get if you license H.264 and is what VP8 only browser will be competing against in browsers that have both
- Yes, the MTI should be constrained baseline but the actually implementation on a device like a smartphone will exceed that

Complaint #4

- But you did not tell me about the bitrate