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BROADCAST SYSTEMS

XAVC Creation in FFmpeg

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In an ideal world...

- AVC-Intra (SMPTE RP 2027) files would interoperate
- Actually 3 (?) vendor-specific implementations
 - Constrained for camera encoders.
 - Vendor lock-in
- Many applications require specific vendor-specific data or structure in video.
 - Vendor decoders expect this, otherwise crash.
- FFmpeg uses x264 video encoder.

Previous work (2013)

- Reverse engineer Panasonic AVC-Intra format
 - Very tedious, add fixed frame size in addition to traditional VBV encoding
 - Understand Panasonic data structures
- Prove equipment doesn't handle full range of AVC features at DPP and IRT interop (or lack thereof?).

New Work (2017)

- Broke an important company rule!
- NRK (working with EBU) asked us to support XAVC (Sony flavour)
 - Reverse engineered to be close to exact
- Quantel FileFlow/Vantage/IPV Xcode/Final Cut X/Final Cut 7/Avid Media Composer/Vegas – GOOD
- Premiere Smart Render - BAD

The code

- <https://github.com/OpenBroadcastSystems/x264-xavc>



Elon Musk ✓

@elonmusk

Following



Replying to @elonmusk @bfslandinglegs and 2 others

Not that this is remotely equiv to man on the moon, but there is a world of difference between talking about some random idea and doing it



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