CELLAR

<u>Codec Encoding for LossLess Archiving and</u> <u>Realtime transmission</u>

Michael Richardson
<mcr+ietf @ sandelman.ca>
Spencer Dawkins
<spencerdawkins.ietf@gmail.com>
Co-chairs

Running Code

- Matroska and EBML go back to 2002
 - Google WebM is fork
- Matroska is a container for multimedia, widely supported, but like a lot of open source, has some issues
- -> need for Rough Consensus

The story so far

- Following in the success of OPUS, a WG was formed in 2015.
- Published RFC7894 (EBML) in 2020
- FFv1 (v0,1,3) in RFC-editor Queue (RFC9043)
- FFv1 v4 being worked on
- Matroska document pretty firm, probably finish in 2021.
- Almost all CELLAR WG meetings have been virtual interims, fourth Tuesday of the month.
 - Open source authors, mostly working after hours
 - But, also includes archivists for whom this is part of their day job

What next?

- FFV1 v4 goals include
 - Better Compression and or Speed
 - BAYER support to efficiently store RAW color CCD images
 - Better error resilience
 - Arbitrary color spaces
 - Limit worst case size after compression
- Arbitrary color spaces: Allow storage of any 2D plane of samples not limited to red, green, blue, alpha or transforms of these.
- Examples: Infrared, Radar, surface vectors, height, age, temperature, charge, elasticity, velocity, acceleration
- Also: attestation.
 - What format should autonomous vehicles make their records in, such that they are compatible with courts world wide?