





EBML/Matroska

IETF Progress

Who Am I ?

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IETF Participants

- Dave Rice
- Steve Lhomme
- Jerome Martinez
- Michael Robertson
- Moritz Bunkus
- Reto Kromer
- Martin Below
- Ashley Blewer
- Tim Terriberry
- many more

CELLAR Workgroup

<https://datatracker.ietf.org/wg/cellar/about/>

- FFv1
- EBML
- Matroska
- FLAC

Format Story

- Matroska was designed so that any audio/video existing can be stored in it (file, DVD, network capture, metadata)
- Matroska can also be used for streaming live content with low latency
- Matroska uses EBML binary format
- Project fork on 2002-12-06 🎂

IETF Process

- Documents are free
- Participation is free (except IRL meetings)
- Patents disclosed by participants
- How the Internet was built
- Monthly CELLAR meeting

GitHub Commits

EBML

695 commits / 12 contributors

Matroska

649 commits / 21 contributors

Progress

- Slower now that EU funding is gone 🐌
- Determination to get it done as strong as ever 🤝
- A standard created by an open community on free time ✨

EBML

- Almost final, may be done in 2019
- Can be used without Matroska
- Allows extensions to base format (RAWcooked in Matroska)
- May still have further development

Matroska

- Split three ways
 - base format for playback
 - codecs (AV1 most detailed)
 - tags (metadata about file, chapters, track)
- Still a tons of work

New

- XML Schema to define EBML formats and extensions
- Generate the Matroska elements spec
- Verify the values are valid
- Generate libmatroska/FFmpeg code
- EBML pathes (like XPATH for binary)

HELP

- Matroska core spec needs more refined details
- Easiest for A/V people to understand/contribute
- Can be all done on GitHub

Thank You

