Checking AV Properties Basics
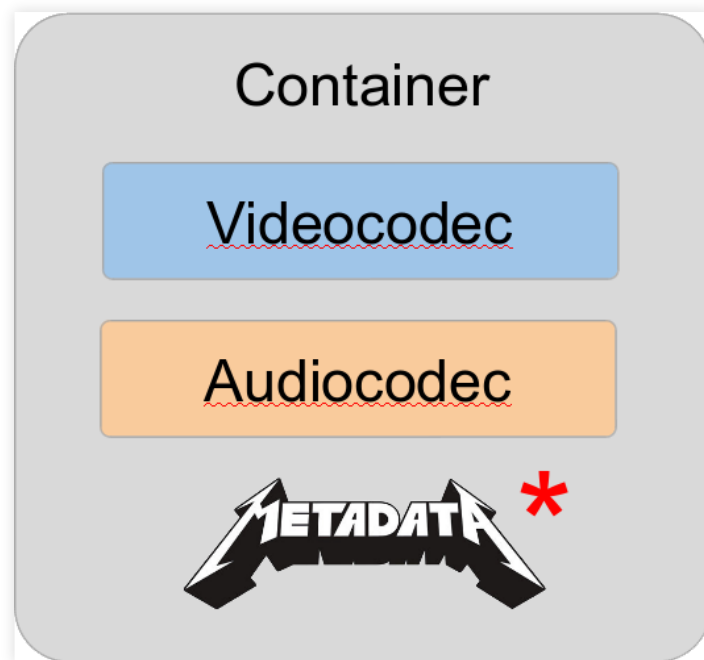
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Abstract

This is about technical properties of audiovisual files,
how to identify and check/validate them.

The "Digital Video Trinity"
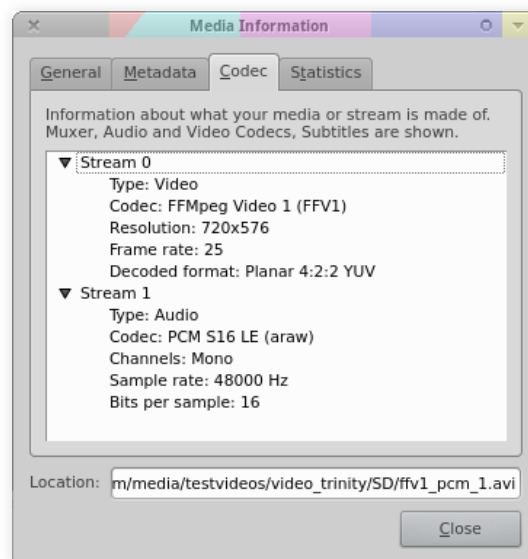

Structure

Tools

We'll show these here:

- VLC
- MediaInfo

VLC

- Great videoplayer
- 99% chance you have it on the computer
- Allows quick-check of tech-MD
  (Ctrl + J)
- For all formats it can play!

Website: videolan.org/vlc

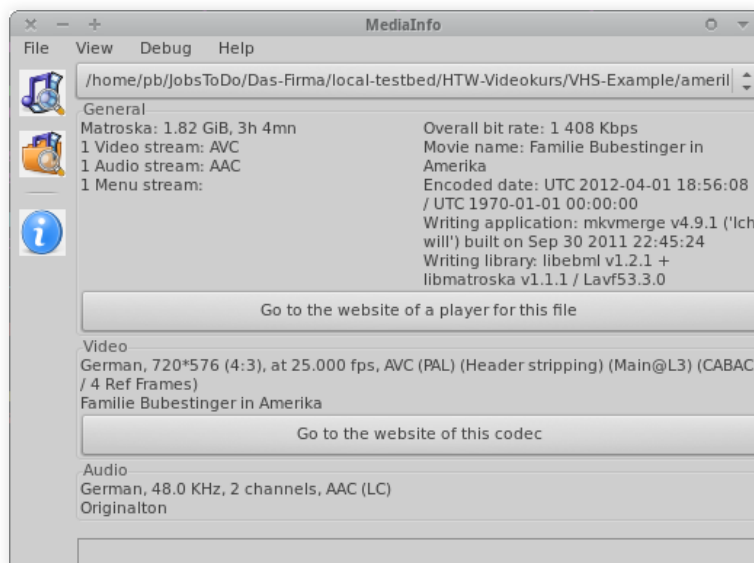# VLC

Very handy, but not the best for this job.

MediaInfo

> *"MediaInfo is a convenient unified display of the most relevant technical and tag data for video and audio files."*

Website: mediaarea.net/MediaInfo

MediaInfo

MediaInfo GUI

View 'Easy'

- General = container level
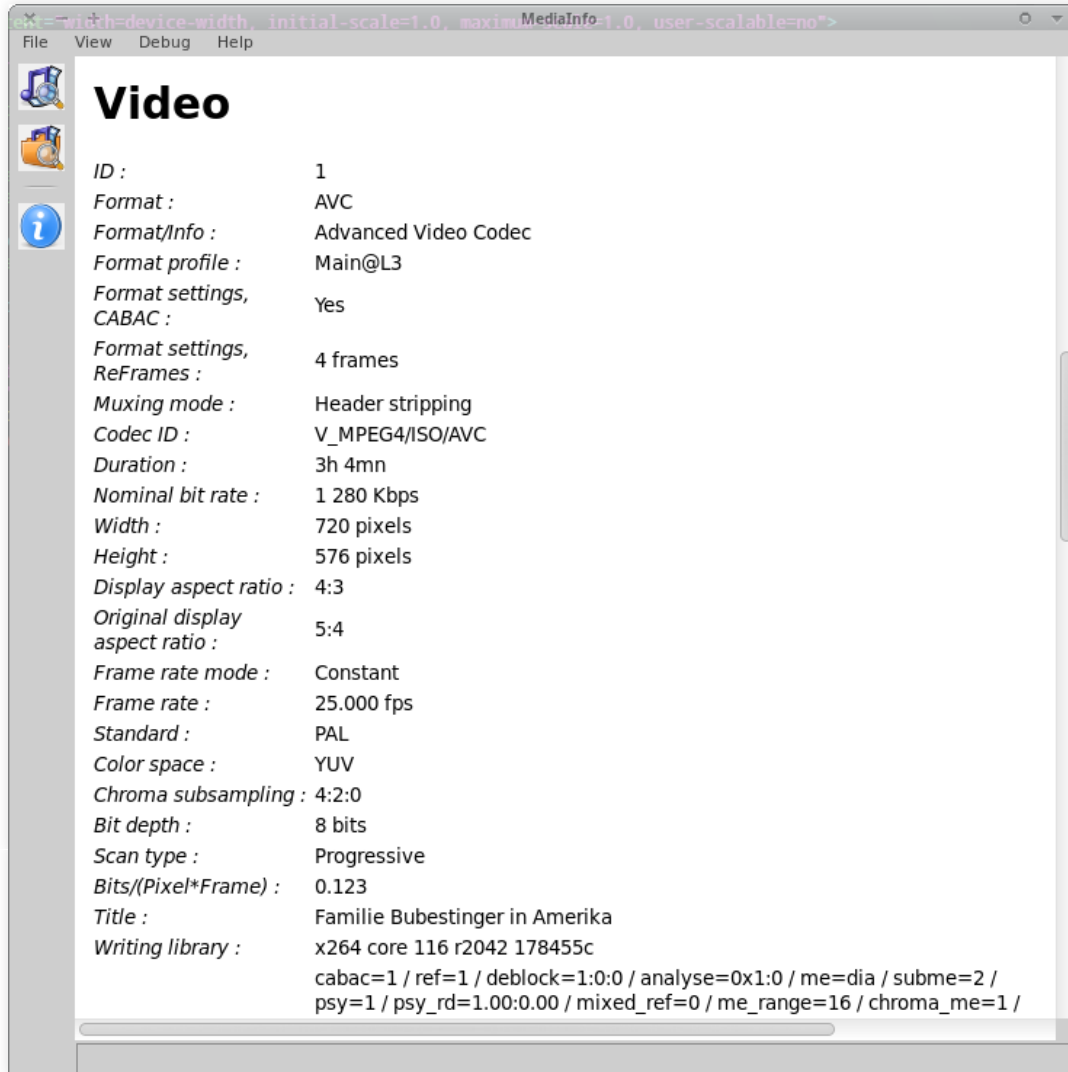- Video / Audio
- Other

A/B comparison

(Only in view 'Easy')

- Load more than 1 file:
  - Select multiple files
  - *or* drag/drop a whole folder
- Scroll dropdown = switch between files

Excellent for a quick spotting of common/different values in a given set.

View 'HTML'

File   View   Debug   Help

Video

ID :	1
Format :	AVC
Format/Info :	Advanced Video Codec
Format profile :	Main@L3
Format settings, CABAC :	Yes
Format settings, ReFrames :	4 frames
Muxing mode :	Header stripping
Codec ID :	V_MPEG4/ISO/AVC
Duration :	3h 4mn
Nominal bit rate :	1 280 Kbps
Width :	720 pixels
Height :	576 pixels
Display aspect ratio :	4:3
Original display aspect ratio :	5:4
Frame rate mode :	Constant
Frame rate :	25.000 fps
Standard :	PAL
Color space :	YUV
Chroma subsampling :	4:2:0
Bit depth :	8 bits
Scan type :	Progressive
Bits/(Pixel*Frame) :	0.123
Title :	Familie Bubestinger in Amerika
Writing library :	x264 core 116 r2042 178455c
	cabac=1 / ref=1 / deblock=1:0:0 / analyse=0x1:0 / me=dia / subme=2 / psy=1 / psy_rd=1.00:0.00 / mixed_ref=0 / me_range=16 / chroma_me=1 /

View 'HTML'

- Nicer to read than view 'Text'.
- Identical content.

Machine Readable

(aka "parsable output formats")

- More suited for automated workflows.
- Can be saved from GUI.
- But: Usually commandline.

Machine Readable Output Formats

- XML
- **JSON**
- **CSV**
- EBUCore
- PBCore
- MPEG-7
- FIMS
- ...

Comments?

Questions?