

# An Introduction to Video Transformations

## FFmpeg fürs Archiv

Kinemathek Lichtspiel, Bern, 3. Mai 2013  
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## Exercise #1: Formats

- Container: MOV, AVI, MP4, etc.
- Video: DV, H.264, etc.
- Sound: PCM, AAC, WAV, etc.

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## Exercise #2: Image Raw Data

- R'G'B'
- Y'CbCr
  
- 4:4:4
- 4:2:2
- 4:2:0 and 4:1:1

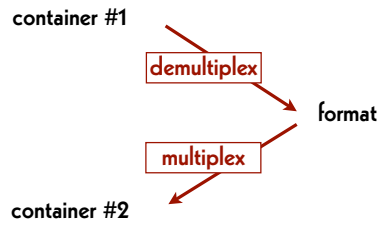
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## Exercise #3: Transformations

- Encode / Decode
- Multiplex / Demultiplex
- Filter

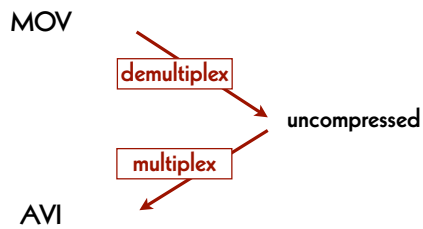
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## Container Transformation



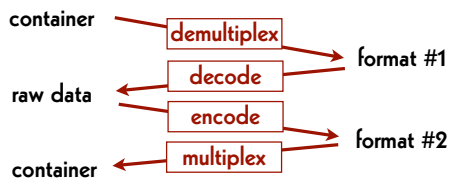
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## Example: MOV to AVI



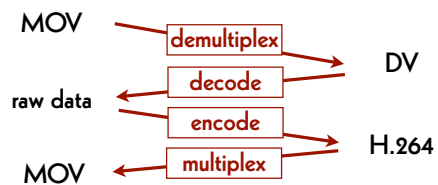
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## Format Transformation



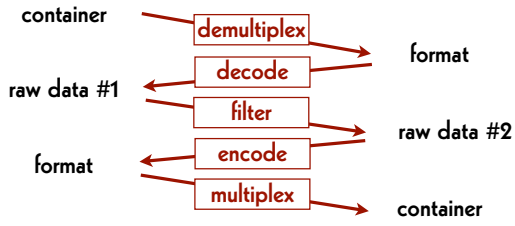
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## Example: DV to H.264



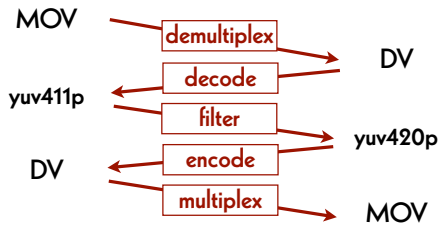
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# Data Transformation



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## Example: yuv411p to yuv420p



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## Example: Audio Content

MOV  
 demultiplex  
 PCM  
 decode  
 raw data  
 encode  
 AAC  
 multiplex  
 MP4

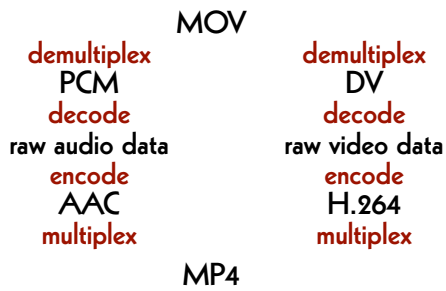
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## Example: Video Content

MOV  
 demultiplex  
 DV  
 decode  
 raw data  
 encode  
 H.264  
 multiplex  
 MP4

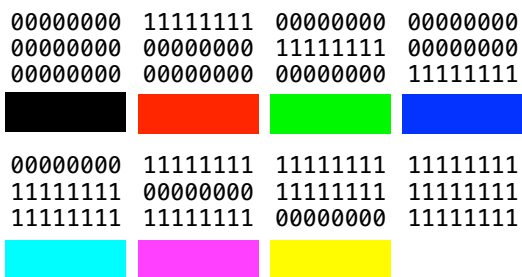
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## Example: AV Content



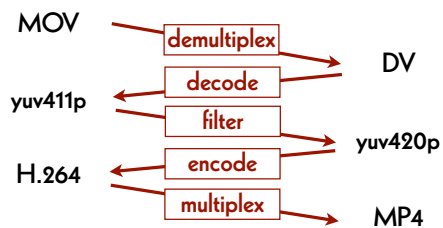
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## RGB24



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## Example: Five Steps



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## AV Preservation by reto.ch LLC

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