

APPLICATIONS OF HTTP: STREAMING VIDEO AND MPEG-DASH

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Feb 1, 2022



ATTRIBUTION

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- These slides incorporate material from:
 - The Blender Foundation (blender.org)

OPEN-SOURCE MOVIES: BLENDER.ORG AND CAMINANDES.COM

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Open Movies



Spring (2019)

Spring is the story of a shepherd girl and her dog, who face ancient spirits in order to continue the cycle of life. This poetic and visually stunning short film was written



Agent 327: Operation Barbershop (2017)

Agent 327 is investigating a clue that leads him to a barbershop in Amsterdam. Little he knows that he is being tailed by mercenary Boris Kloris...



Caminandes: Llamigos (2016)

The third episode of the Caminandes series is about Koro the Llama and a pesky but very cute penguin.

Production started in november 2015, release was in

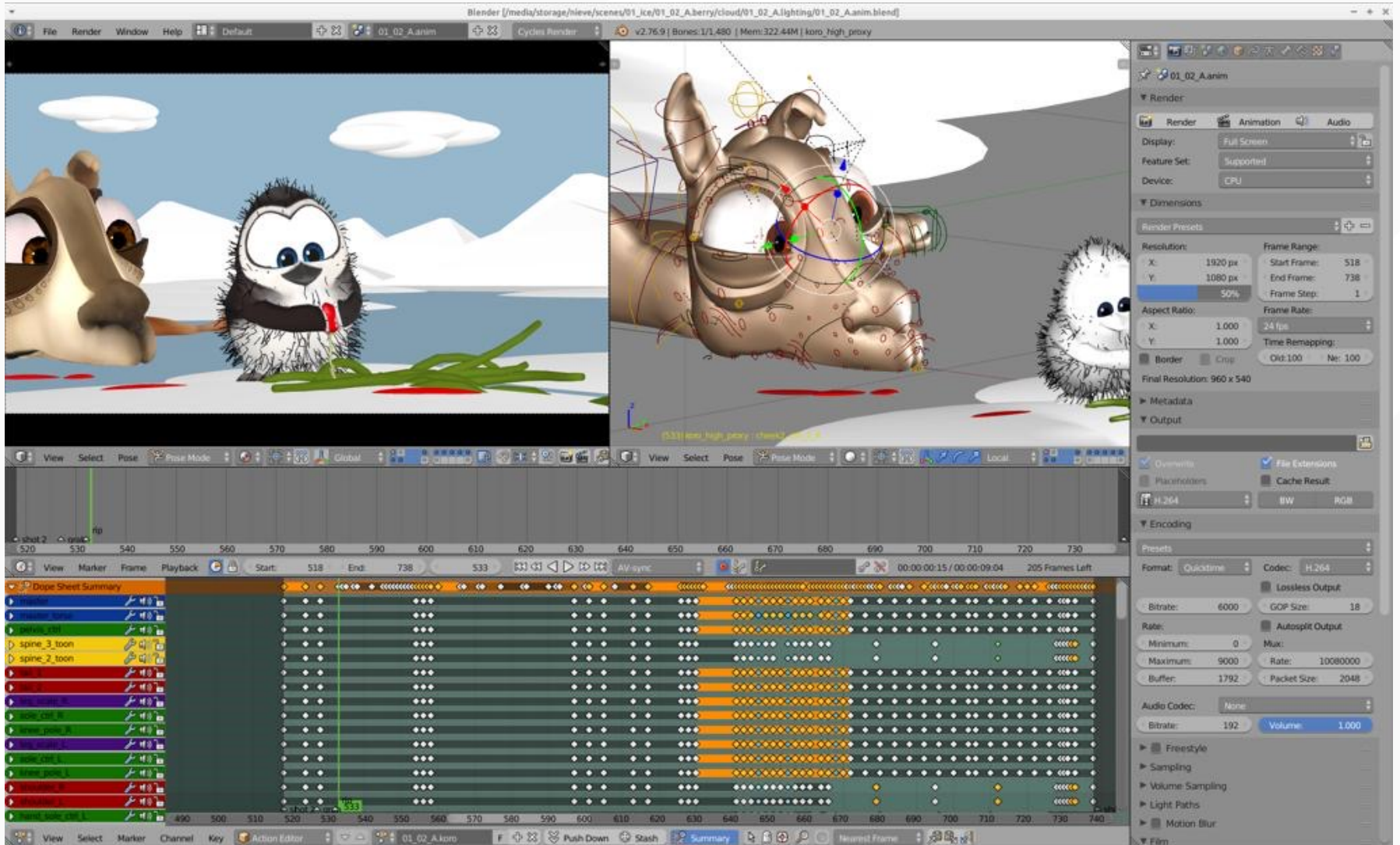
DEMO: CAMINANDES LLAMIGOS (2.5 MINUTES)



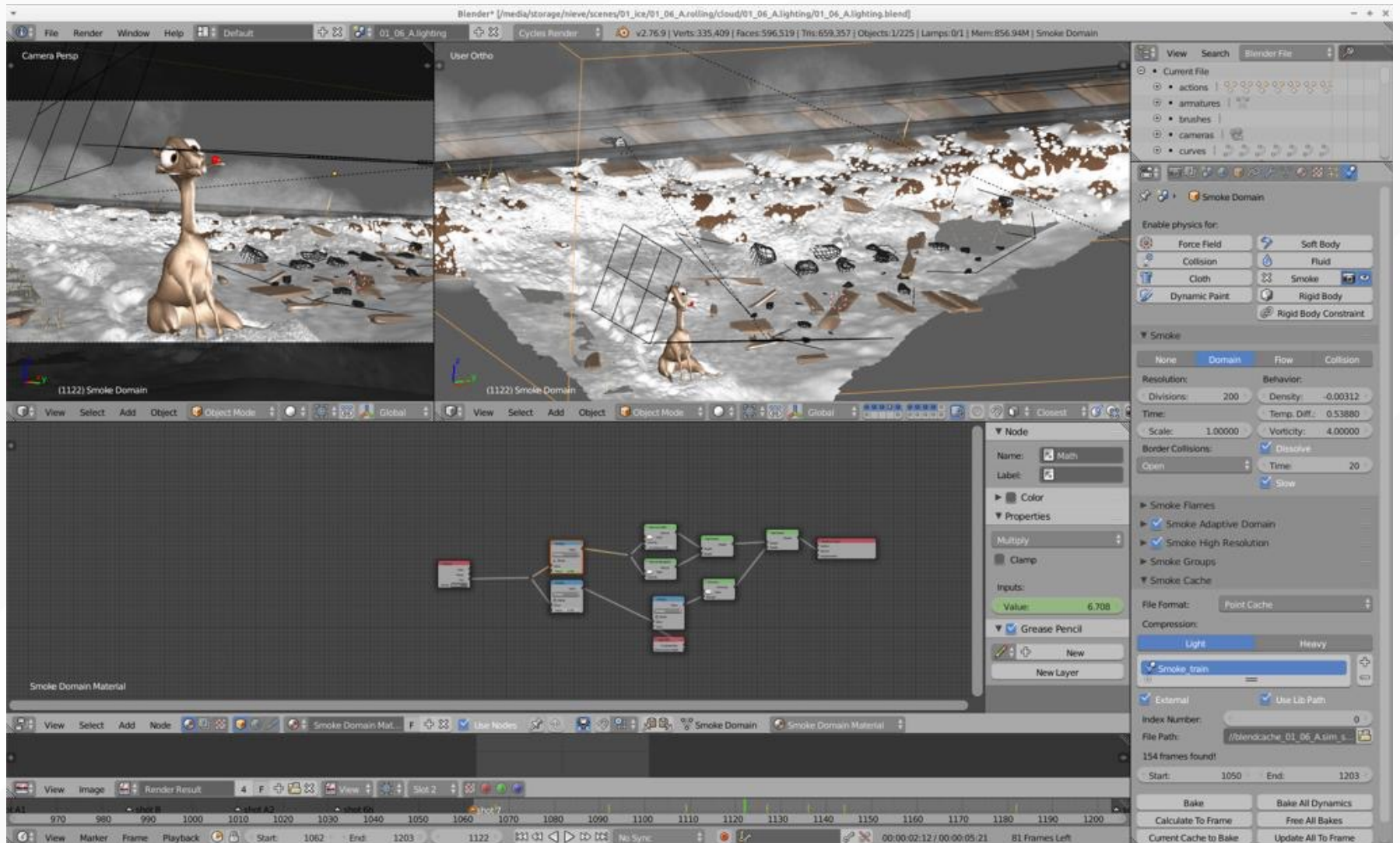
DEMO: CAMINANDES LLAMIGOS



OPEN-SOURCE MOVIES



OPEN-SOURCE MOVIES



LOSSY IMAGE COMPRESSION



8.9M



68.34K

BITRATES

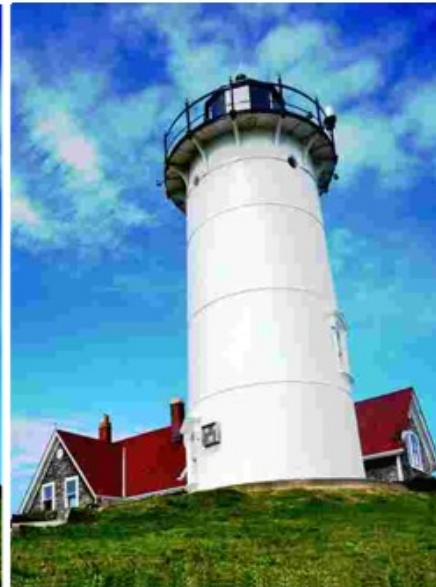
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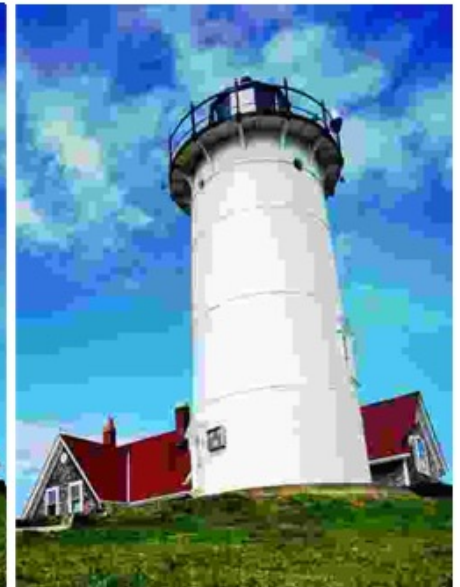
Quality = 50



Quality = 10



Quality = 5

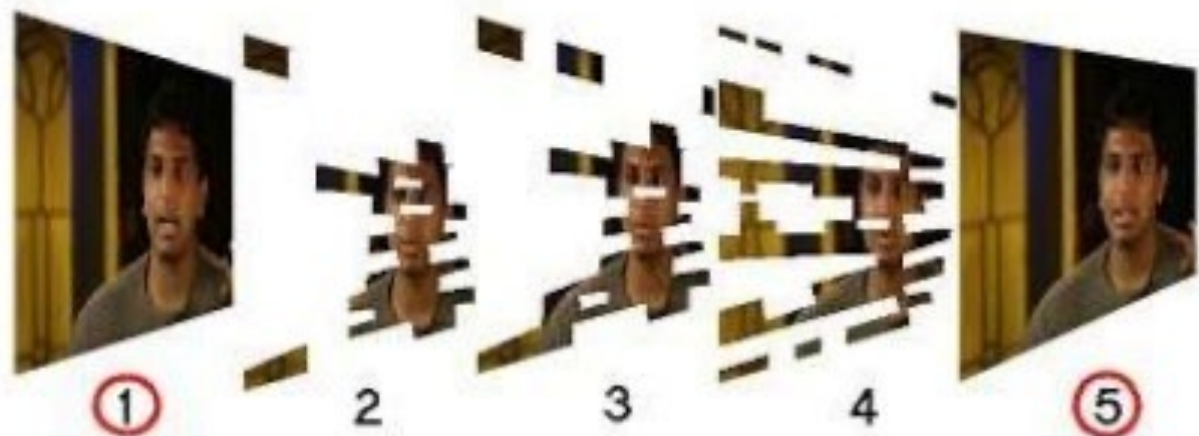


Less Compression

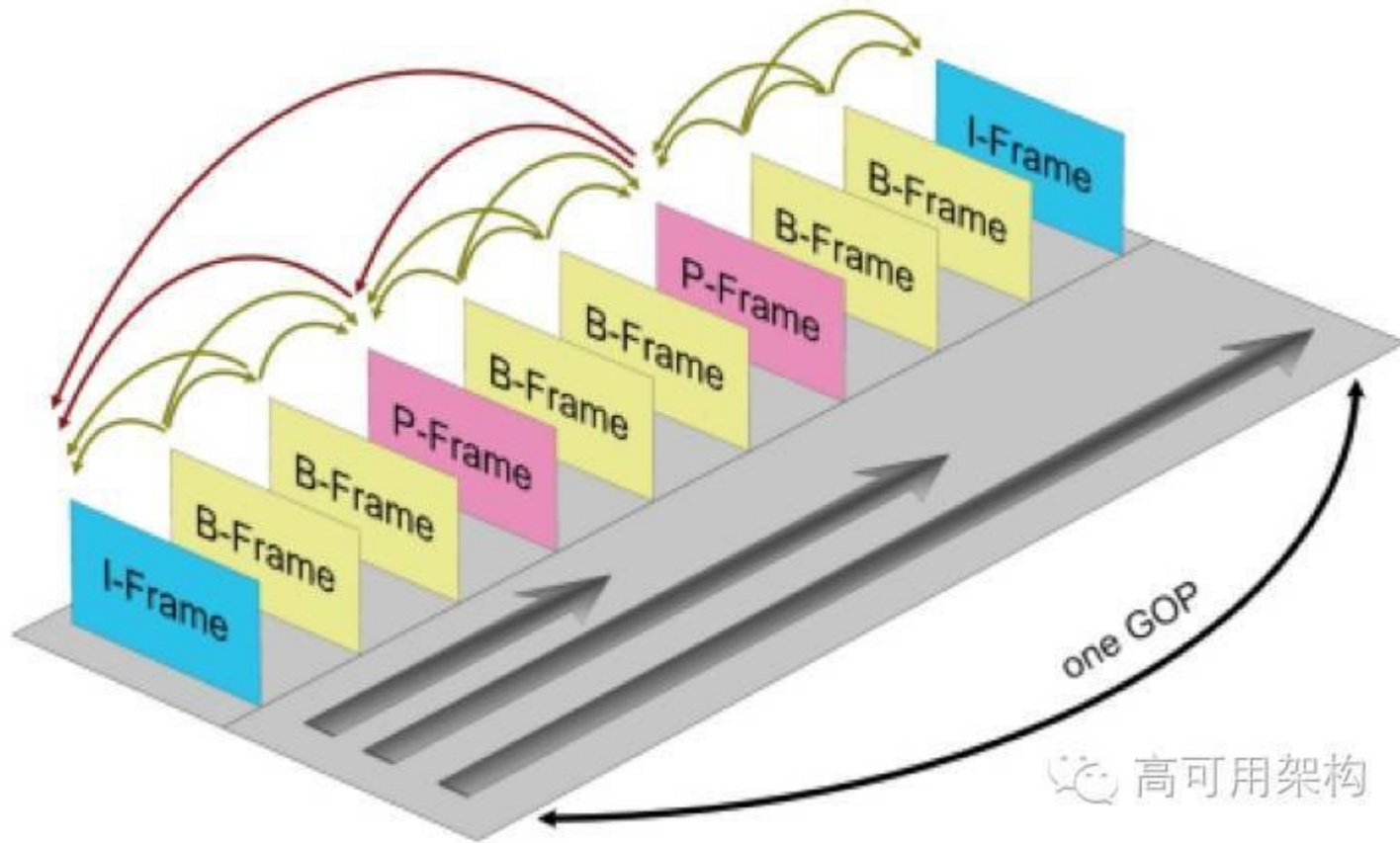


More Compression

Example



I-FRAMES, B-FRAMES, P-FRAMES, GOPS



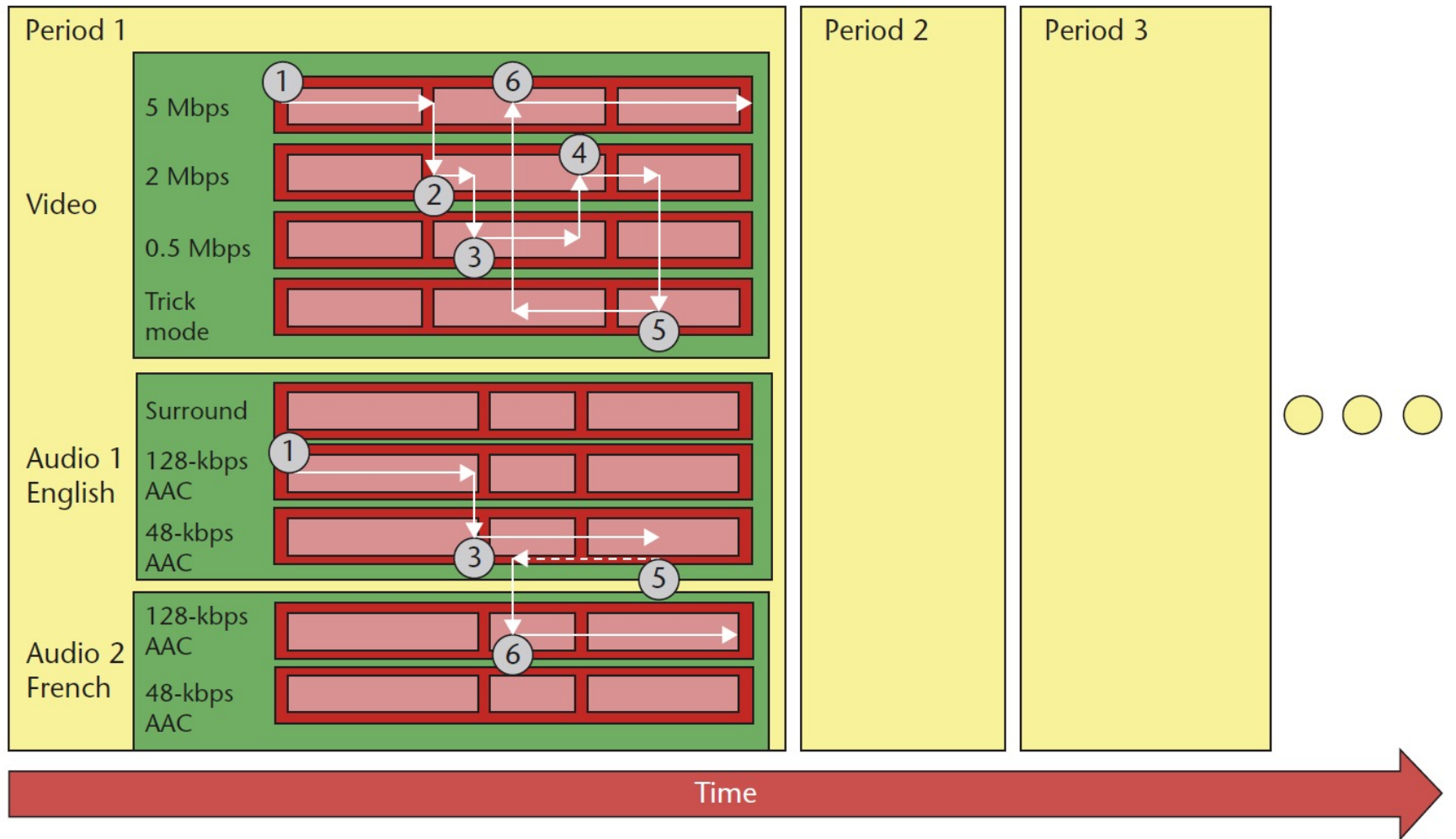
ENCODING PARTS OF EACH IMAGE

These sections are identical

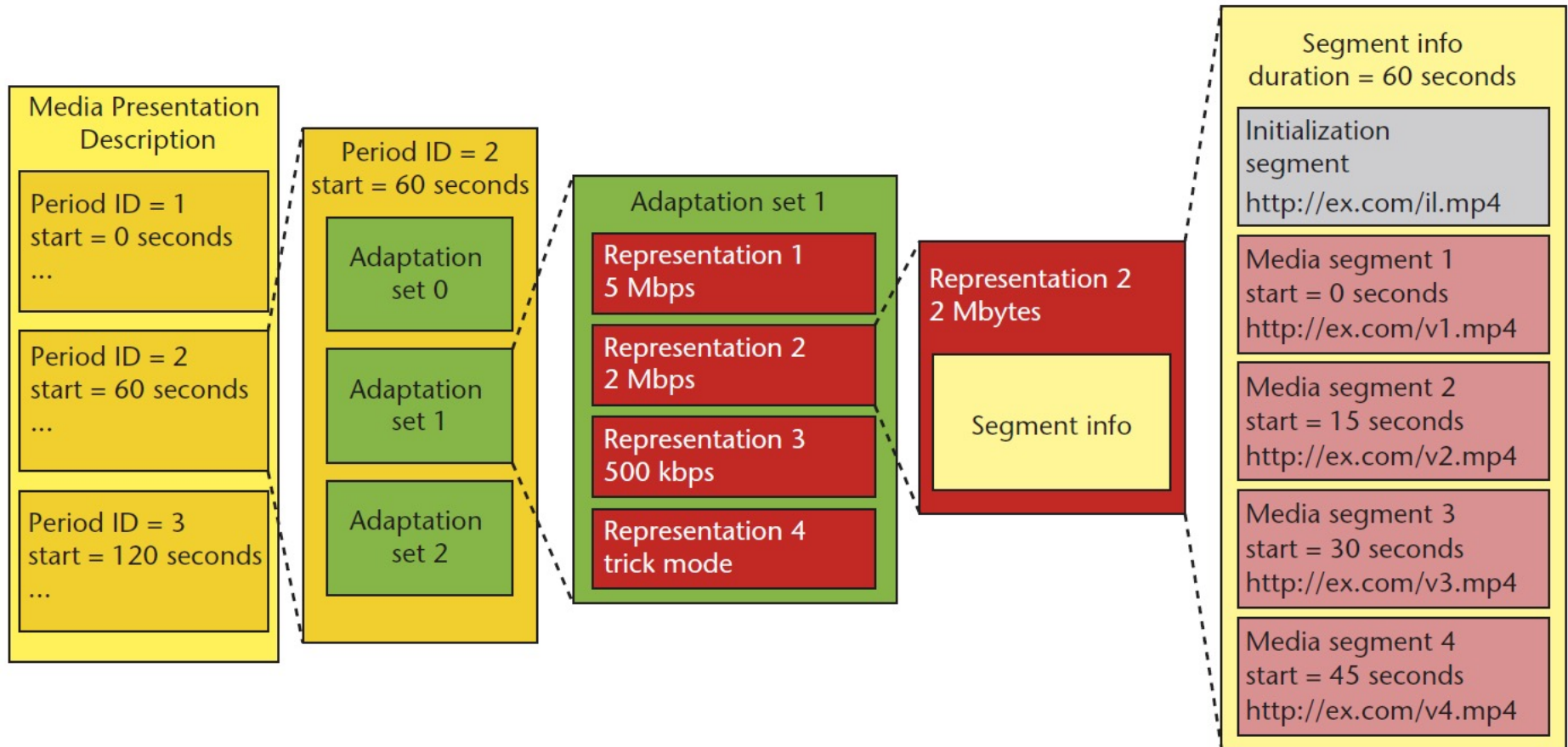


New image content

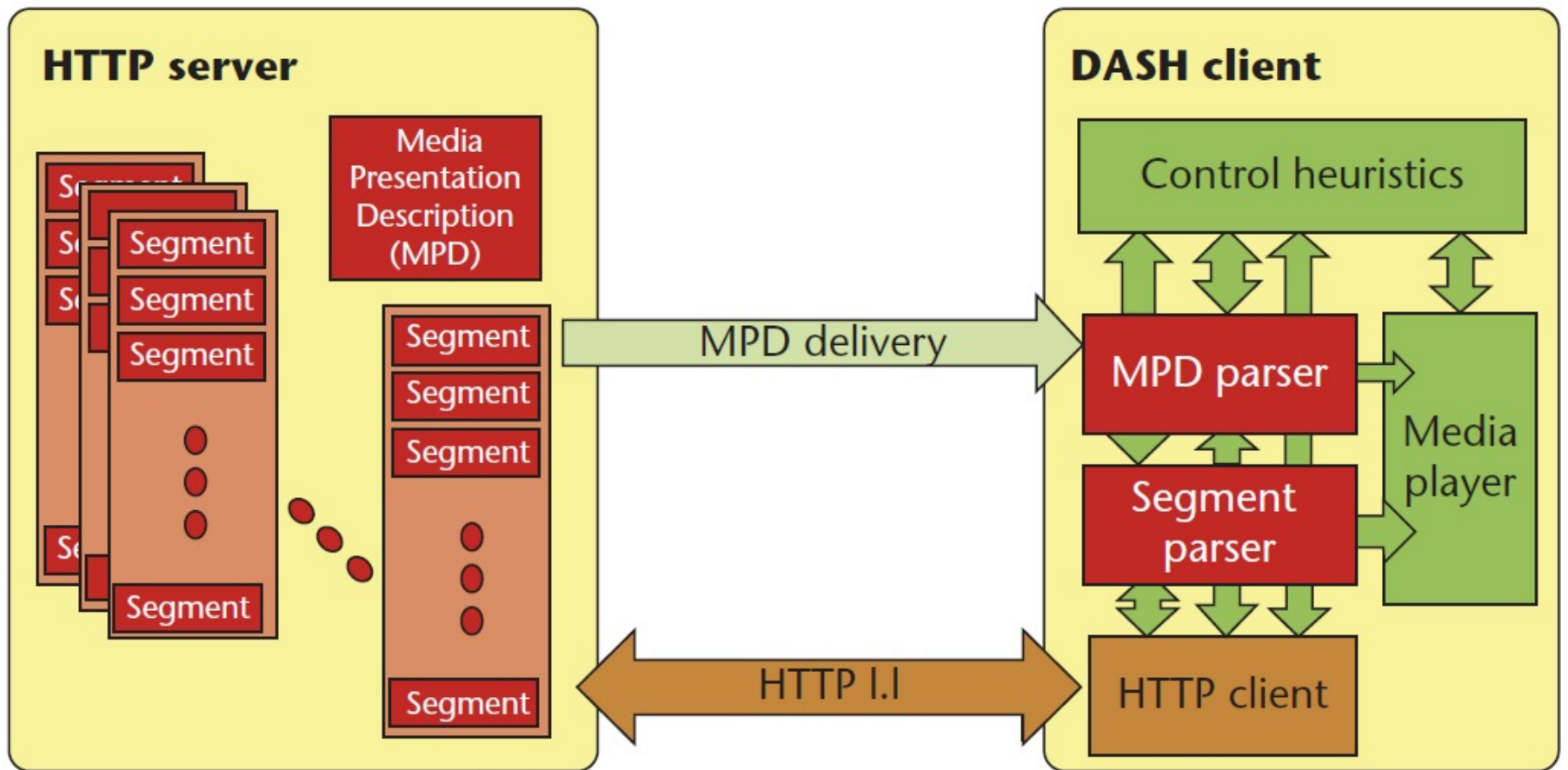
DYNAMIC ADAPTIVE STREAMING EXAMPLE



MPD (MEDIA PRESENTATION DESCRIPTION) FILES



MPEG-DASH AND HTTP SERVERS



DEMO

Tracing HTTP requests related to an MPEG-DASH stream

UC San Diego