

# Video over ICN

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# Draft focus

- Video composes most of the traffic in current network
- No signs for trend to abate: any new Internet architecture need to handle video
- Questions of the draft:
  - Can current Internet mechanisms for video distribution be adapted to an ICN?
  - ~~– Should new mechanisms be designed that are native to ICN?~~

# Draft-video

- 3<sup>rd</sup> version of the draft: Berlin, London, Toronto
- No seismic changes: same contributors, roughly same length
- But new organization, new ToC, sharpened focus

# Current video mechanisms

- Look at some use-cases trying to capture a range of requirements:
  - Netflix-like video streaming
    - Biggest share of traffic, but also simpler
    - DASH-like mechanisms exhibit similarity and complementarities with ICN architecture
  - P2P video distribution
    - Infrastructure-less scenario is one of the key selling point of ICN
    - PPSP-based ICN extensions
  - IPTV
    - Real-time delay constraints
- Other use-cases no in the draft (yet?)
  - Flash crowds/peak
  - Video-conferencing?
  - In- network DVR

# Next steps?

- Interest in Berlin to have a WG document on the topic?
- This document would be a survey of current techniques and define use-cases.
- Next document: native ICN video streaming, what would it look like?
  - How to fully leverage the abstractions of, say, CCN/NDN? What transport layer? How to use cache? New ways to do rate adaptation? Multi-source transport?
  - Draft list some research questions