

MOPS

A 2-year Retrospective

November 2021

Chairs

Kyle Rose (presenting)
Leslie Daigle

Technical Advisor

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How it started

Pre-history	Video Interest Group (VIG) & GGIE side meetings
2019 Jul 22	MOPS BoF (IETF 105 Montreal)
2019 Nov 1	WG formed
2019 Nov 21	First MOPS in-person session! (IETF 106 Singapore)
2020 Mar 10	IETF 107 Vancouver in-person meeting canceled

How it's going

Pre-history	Video Interest Group (VIG) & GGIE side meetings
2019 Jul 22	MOPS BoF (IETF 105 Montreal)
2019 Nov 1	WG formed
2019 Nov 21	First MOPS in-person session! (IETF 106 Singapore)
2020 Mar 10	IETF 107 Vancouver in-person meeting canceled
2020 Apr 15	Virtual interim (replacement for IETF 107 cancellation)
2020 Jul 28	IETF 108 virtual session
2020 Oct 30	Virtual interim
2020 Nov 17	IETF 109 virtual session
2021 Mar 12	IETF 110 virtual session
2021 Jul 27	IETF 111 virtual session

Milestones

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Date ↕ **Milestone**

Jul 2022	Last-call document on Society of Motion Picture and Television Engineers (SMPTE) protocol reliance on IETF protocols (including explicit outreach to SMPTE)
Jul 2022	Last-call document on Streaming Video Alliance (SVA) reliance on IETF protocols (including explicit outreach to SVA)
Nov 2021	IESG to decide whether continue, re-charter or close MOPS WG
Nov 2021	Last-call document on operational considerations for low latency streaming video applications
Nov 2021	Draft documenting Society of Motion Picture and Television Engineers (SMPTE) protocol reliance on IETF protocols
Jul 2021	Last-call document on edge network considerations for streaming media
Jul 2021	Revised draft operational considerations for low latency streaming video applications draft-ietf-mops-ar-use-case
Jul 2021	Draft documenting Streaming Video Alliance (SVA) reliance on IETF protocols

Done milestones

Date ↕ **Milestone**

Done	Initial draft operational considerations for low latency streaming video applications draft-ietf-mops-ar-use-case
Done	Develop work items specific to media acquisition and delivery
Done	Revised draft of edge network operational considerations for streaming media
Done	Draft of edge network operational considerations for streaming media draft-jholland-mops-taxonomy

Document adoptions

2020 Feb 13	draft-ietf-mops-streaming-opcons
2021 Mar 25	draft-ietf-mops-ar-use-case

Importantly, publishing documents is not the only (or even primary) purpose of MOPS

MOPS Engagements beyond drafts

External community engagement to MOPS:

SMPTE updates: IETF 106, 2020 interim,

Streaming Video Alliance updates: IETF 106, 2020 interim 1, 108, 110, 111

SC 29/WG 11 Liaison stmt: 2020 interim 1

External community engagement by MOPS:

MOPS updates to SVA on-going after IETF meetings during 2020 & 2021

[SMPTE MOPS paper 2021](#) by MOPS Chairs & Technical Advisor

Charter activities

- 1/ **Solicit regular updates** from other media technology developing consortia/standards bodies working with IETF-developed protocols.
- 2/ **Solicit input** from network operators and users to identify operational issues with media delivery in and across networks, and **determine solutions or workarounds** to those issues.
- 3/ **Solicit discussion and documentation** of the issues and opportunities in media acquisition and delivery, and of the resulting protocols and technologies developed outside the IETF.
- 4/ **Document** operational requirements for media acquisition (for example, from cameras and recording devices) and delivery.
- 5/ **Develop operational information** to aid in operation of media technologies in the global Internet.

Charter activities

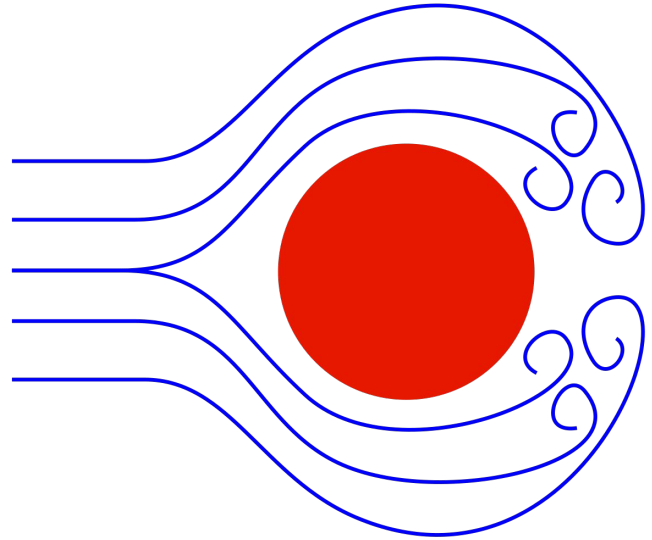
Rendezvous!

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- 3/ **Solicit discussion and documentation** of the issues and opportunities in media acquisition and delivery, and of the resulting protocols and technologies developed outside the IETF.
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Engagement challenges

Virtual meetings are a drag

- No hallway conversations
- No hackathon room
- Fewer tourists and less touring
- Less cross-pollination
- Less new work overall
- ...



That having been said...

- Presentations solicited, talks given
- New participants have sought out MOPS

Lots of intangibles

- Conversations happening
- Media having more of a seat at the table at IETF
 - MOQ
 - Multicast renaissance
 - Latency reduction

How to increase MOPS efficacy

- Meet in-person? *Not actionable*
- Carry on as-is?
- Broaden draft scope?
- Figure out how to unblock unmet milestones?
- Solicit feedback from non-participants?
- Coordinate with in-progress standards activity?
- Document a vision/roadmap for IETF contributions to the media ecosystem?
- Solicit input from other WGs facing similar challenges?

Thoughts? Suggestions?