

WISH WG Recharter

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New proposed charter

The WISH working group is chartered to specify a simple, extensible, HTTPS-based signaling protocol to establish one-way WebRTC-based audiovisual sessions between broadcasting tools, media players and real-time media broadcast networks.

Background:

WebRTC defines a set of wire protocols for real-time media transmission, as well as a profile of the Session Description Protocol (SDP) for setting up and controlling the associated media streams. Because of its typical use cases, and to increase overall flexibility, WebRTC did not specify a wire protocol for exchanging SDP messages, leaving the creation of such protocols up to the applications that use WebRTC. This works well when WebRTC clients are vertically integrated with the servers they communicate with, as it allows for rapid iteration of new features.

At the same time, the use of WebRTC as a mechanism for large-scale media broadcast is gaining popularity, and unlike more vertically integrated uses of WebRTC, WebRTC-based media distribution networks would benefit immensely from being able to re-use the several broadcasting tools that have been developed over time.

To date, these media distribution networks have employed their own proprietary signaling protocols to establish the connection between broadcasting tools and the network, generally requiring either bespoke software or customized modifications to existing tools.

With the large number of available tools and the growing number of real-time media distribution networks, this ad-hoc approach to creating custom protocols for establishing sessions clearly does not scale. The real-time broadcasting ecosystem would benefit immensely from a set of common protocols to meet this goal.

Deliverables:

The product of this working group will be a specification for a simple, extensible, HTTPS-based signaling protocol set to establish one-way WebRTC-based audiovisual sessions between broadcasting tools and real-time media broadcast networks, and between those networks and the media players.

This working group will use existing HTTPS, WebRTC, and SDP mechanisms to the extent possible. While no extensions to those core protocols is expected, the working group may consider such extensions if they are necessary to meet the requirements of broadcasting tools and networks. Any such work will be coordinated with the HTTPBIS, MMUSIC, and/or MOPS working groups, as appropriate. Additionally, this working group will coordinate with HTTPBIS and HTTPAPI to assure that the HTTP protocol is being used according to current best practice.

https://github.com/wish-wg/wg-materials/pull/6/files?short_path=35789ee#diff-35789ee35630f466414451281d0b9c04dc0ec4b010d7856418ff763badefe4bb