

draft-murillo-whep-01

<https://datatracker.ietf.org/doc/html/draft-murillo-whep-01>

Sergio Garcia Murillo



WHEP: WebRTC-HTTP egress protocol

- Egress is out of scope of WISH WG
- WHEP reuses all the mechanisms that have been put in place for WHIP: draft is basically /WHIP/WHEP/g
- Why WHEP?
 - Interoperability between WebRTC services and products.
 - Reusing player software which can be integrated easily.
 - Integration with Dynamic Adaptive Streaming over HTTP (DASH) for offering live streams via WebRTC while offering a time-shifted version via DASH.
 - Playing WebRTC streams on devices that don't support custom javascript to be run (like TVs).
- WHIP and WHEP can be used together for service interoperability
- Should we recharter the WISH WG to include egress?
 - Presented at DISPATCH: Up to the WISH WG to decide if the WG should be rechartered to add egress in the scope.

WHEP Protocol Operation

- Sounds familiar?

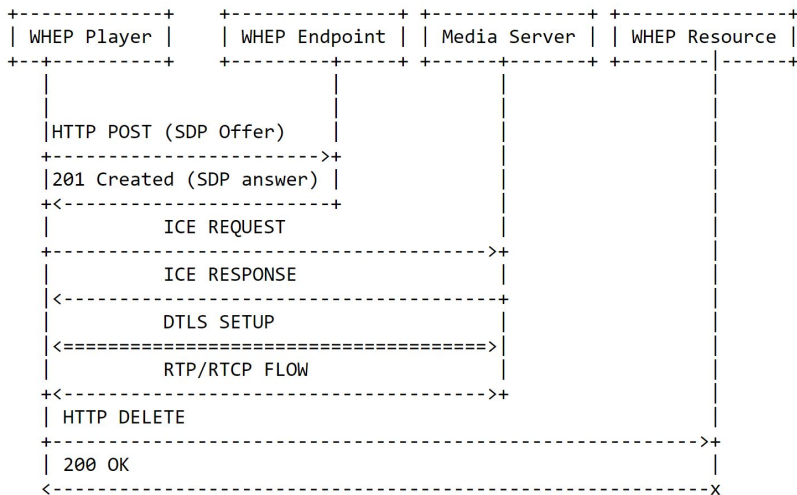
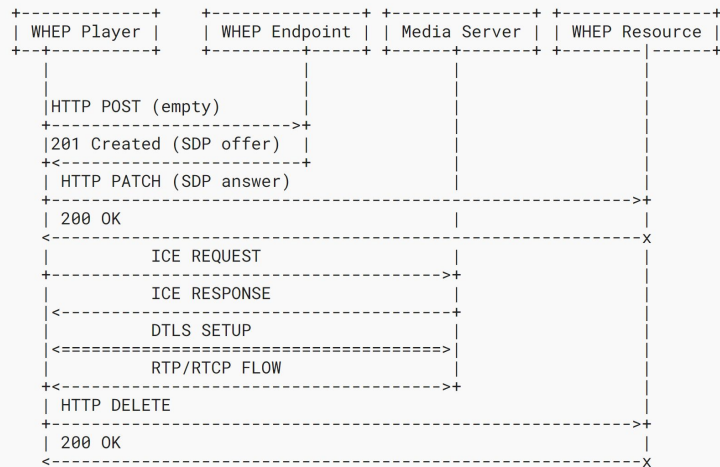


Figure 1: WHEP session setup and teardown

WHEP Protocol Operation (WHEP Client as answerer)

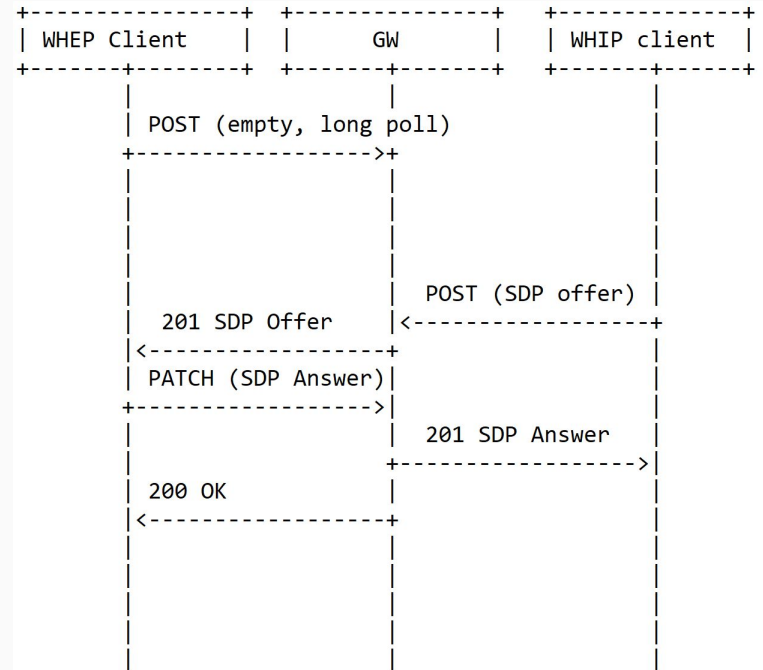
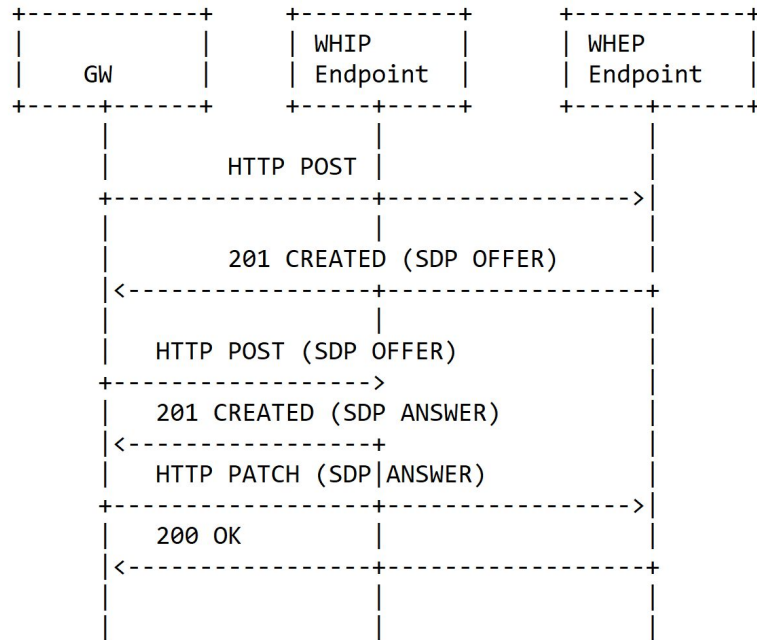
- WHEP Player may wish the service to provide the SDP offer
 - avoid setting up an audio and video session when only audio is supported
 - some webrtc implementations don't support createOffer (WTF)
 - Allows WHIP to WHEP interoperability
- Pros:
 - Issue with turn server config solved
- Cons:
 - Media server may not know the actual codecs when the WHIP player connects
- Should we adopt it in WHIP too?



What's missing?

- **WHEP has more requirements in terms of functionality than WHIP**
- **Need to define extensions to match DASH functionality**
 - **Multilanguage support**
 - **Remote pause/mute**
 - **Subtitles/Live captions**
 - **Metadata**
 - **Client side resolution/quality selection**
 - **Events?**

WHIP/WHEP interoperability



Next steps

- Define and add protocol extensions for missing metadata
- Recharter WISH WG and adopt WHEP as WG item.