

# draft-murillo-whep-00

<https://datatracker.ietf.org/doc/html/draft-murillo-whep-00>

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# 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?

# WHEP Protocol Operation

- Sounds familiar?

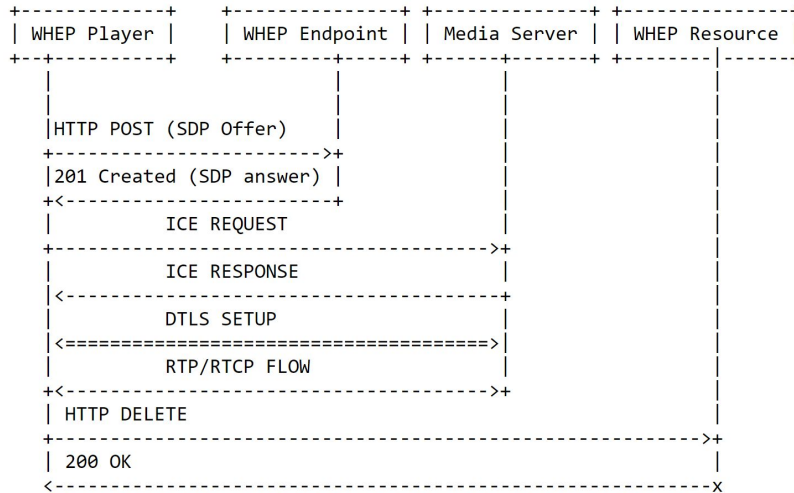


Figure 1: WHEP session setup and teardown

# 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 now the actual codecs when the WHIP player connects
- Should we adopt it in WHIP too?

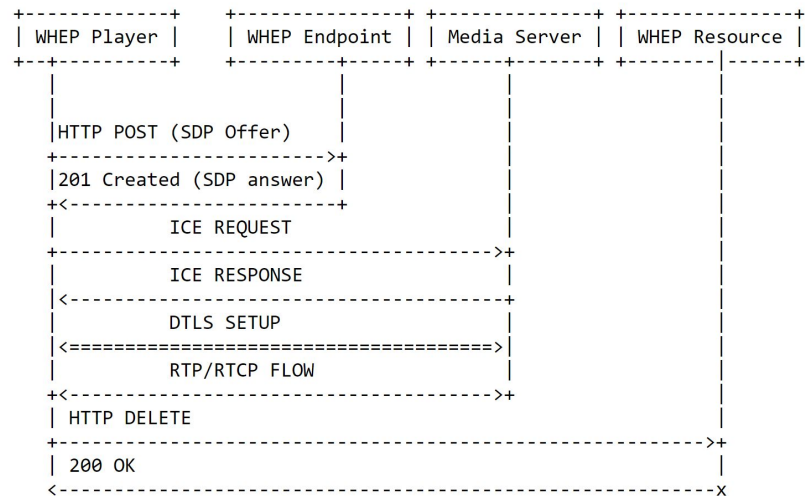
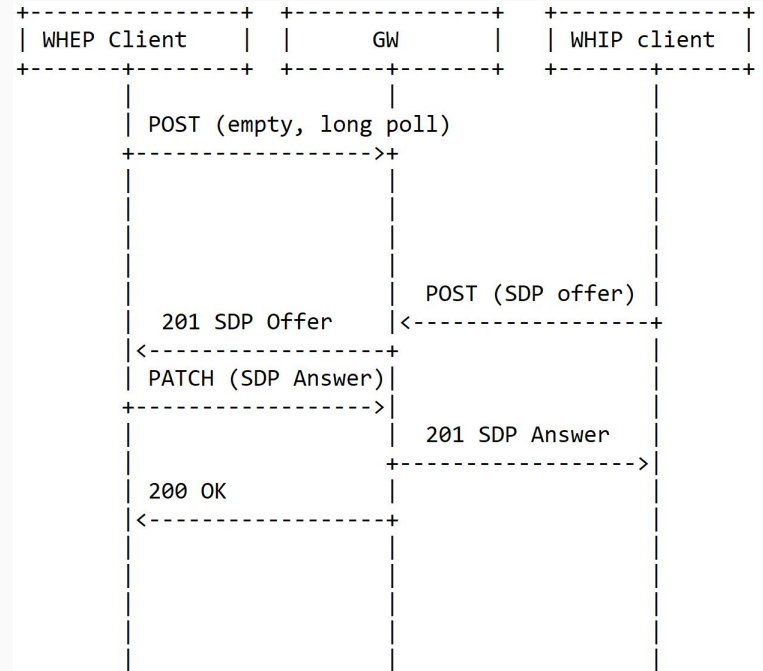
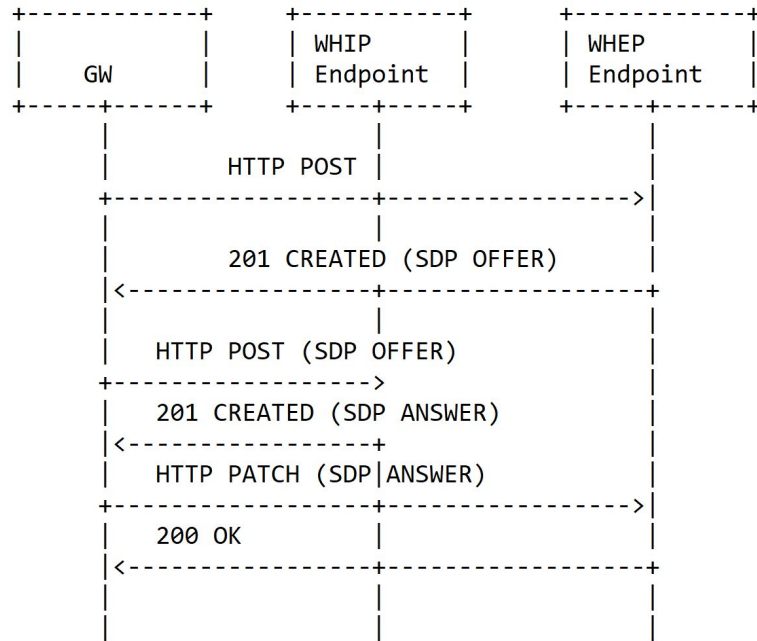


Figure 1: WHEP session setup and teardown

# 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 or present it in DISPATCH for creating a new WG?

# Discussion