

WHEP integration checklist

The HTTP verbs of draft-ietf-wish-whep-03, the counter-offer flow, the vendor extension surface, and the 2026 platform list.

POST — begin a playback session

draft-ietf-wish-whep-03 §4.2

To: WHEP endpoint URL

Headers: Content-Type: application/sdp · Authorization: Bearer ...

Body: SDP offer (recvonly · BUNDLE · single MediaStream)

Happy 201: Location: /sessions/{id} · ETag: "..." · body = SDP answer (sendonly)

406 counter-offer: body = server SDP offer · Location + valid-until=30s

409 Conflict + Retry-After: no live publisher yet (§4.2.8)

PATCH — two distinct jobs

§4.2.2 (SDP answer) and §4.4 (ICE)

Job 1 — SDP answer to counter-offer:

Content-Type: application/sdp · body = SDP answer (recvonly) · response 204 No Content

Job 2 — Trickle / restart: Content-Type: application/trickle-ice-sdpfrag · If-Match: "..." (trickle) or * (restart)

Trickle OK: 204 No Content (no new ETag)

Restart OK: 200 OK + SDP fragment + new ETag

Errors: 412 stale ETag · 428 missing If-Match · 422 op not supported

DELETE — end the session

§4.3

To: WHEP session URL (from Location)

Headers: Authorization: Bearer ...

Body: none

OK response: 200 OK · server releases ICE + DTLS + media

If skipped: RFC 7675 consent-freshness expires; loss detected in seconds.

OPTIONS / GET — preflight and health

§4.1 + CORS preflight

OPTIONS: CORS preflight (mandatory for browsers)

OK response: 200 OK · Accept-Post:

application/sdp · CORS headers

GET: 2XX with no body — liveness check only

Extensions: advertised via Link headers (rel = urn:ietf:params:whep:ext:*)

2026 WHEP playback platform snapshot

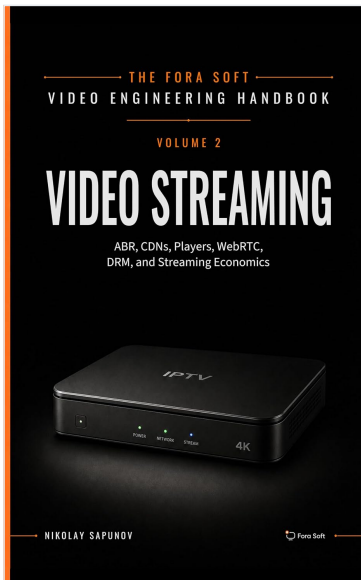
Platform	WHEP	Layer sel.	Events	Notes
Cloudflare Stream	Yes (GA)	JSON API	—	Tracks draft-murillo-whep-01
Dolby Millicast	Yes (GA)	JSON API	SSE	Most mature events stream
AWS IVS Real-Time	Yes (GA)	—	—	Through Web Broadcast SDK
OvenMediaEngine	Yes (GA)	Query param	—	Common self-hosted choice
MediaMTX	Yes (GA)	—	—	Open-source media server
LiveKit / Janus / mediasoup	Yes	Through SDK	Vendor-specific	Self-hosted SFUs
Ant Media v2.10+	Yes (GA)	Vendor API	Yes	Self-hosted or managed
YouTube / Twitch / Facebook	No	—	—	HLS-first; no WHEP roadmap

Browser client crib (RTCPeerConnection)

1. Create RTCPeerConnection. Add two transceivers in 'recvonly' (video + audio).
2. Call pc.createOffer() and pc.setLocalDescription(offer).
3. fetch(WHEP_URL, { method: 'POST', headers: { 'Content-Type': 'application/sdp', 'Authorization': 'Bearer ' + token }, body: offer.sdp }).
4. On 201 → pc.setRemoteDescription({ type: 'answer', sdp: bodyText }). Save Location and ETag from response headers.
5. On 406 → parse counter-offer; pc.setRemoteDescription(counterOffer); pc.createAnswer(); PATCH it back.
6. pc.ontrack → attach to <video> element. On unload: fetch(DELETE) to the session URL.

Pre-flight checklist

- ☐ Server speaks draft-ietf-wish-whep (POST → 201 + Location + ETag).
- ☐ Counter-offer (406) path handled by the player, or codecs hard-coded compatible.
- ☐ HTTPS enforced; never plaintext HTTP in production.
- ☐ Bearer token in Authorization header, not URL query string.
- ☐ TURN server configured (or platform-hosted TURN reachable).
- ☐ Vendor-specific layer selection / events extensions integrated where needed.
- ☐ Audience capacity planned per-viewer, not per-stream.
- ☐ Latency target verified end-to-end (WHIP + WHEP path measured).



GO DEEPER · VOLUME 3 OF 7

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This checklist covers the WHEP verbs, the counter-offer flow and the 2026 playback platforms. Volume 3 covers the playback side in depth: WebRTC and real-time delivery, players and stall recovery, CDN and caching, and QoE monitoring for live viewers.

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- WebRTC and real-time delivery
- CDN and caching
- Players and stall recovery
- QoE monitoring

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