

# HTTP/3 Streaming Rollout Checklist

Companion to: HTTP/1.1, HTTP/2, HTTP/3 — What Changed, and What It Means for Streaming

## 1 · Edge enablement

Turn HTTP/3 on at the CDN edge for every hostname in the streaming pipeline.

- Enable HTTP/3 / QUIC on the CDN for manifest, segment, key, and analytics hosts.
- Confirm Alt-Svc: h3=":443"; ma=2592000 header on the edge response.
- Verify ALPN advertises h3, h2, http/1.1 in the TLS ClientHello.
- Capture before/after metrics: TTFF, P95 segment-download, rebuffer rate.
- Confirm the toggle covers every hostname — one HTTP/2-only host undoes the win.

## 2 · Player observation

Read the negotiated protocol back from the player and log the distribution.

- Web: log PerformanceResourceTiming.nextHopProtocol on each fetch.
- iOS: read negotiated protocol from HTTPURLResponse; report in QoE pipeline.
- Android: capture protocol via HttpURLConnection response headers.
- Healthy rollout shows h3 on 60–80 % of fetches within one week.
- Tag analytics events with the negotiated version for slice-by-protocol analysis.

## 3 · Fallback audit (UDP/443 blocked)

Enterprise networks, schools, hotels, and some carriers block UDP/443.

- Build an isolated lab network with UDP/443 blocked at the firewall.
- Connect from a real player and verify HTTP/2 over TCP picks up cleanly.
- Confirm QoE metrics on the fallback path remain inside SLA tolerances.
- Re-run the test from a representative B2B customer office network.
- Document the fallback behaviour in runbooks before the first enterprise launch.

## 4 · Application-layer pitfalls

Dead features and silent downgrades to watch for in 2026.

- Never rely on HTTP/2 server push — Chrome 106 disabled it, Firefox 132 removed it.
- LL-HLS uses #EXT-X-PRELOAD-HINT since Apple's 2023 spec revision — not push.
- 0-RTT data can be replayed; restrict to idempotent GETs only (RFC 9001 §5.6).
- On gigabit fibre, HTTP/3 can be slower than HTTP/2; measure your own audience.
- QPACK dynamic-table sizing should be tuned in the player and at the CDN edge.

## Adoption snapshot — public-internet HTTP traffic, April 2026

HTTP/2 ≈ 51 % · HTTP/1.1 ≈ 27 % · HTTP/3 ≈ 21 % Sources: Cloudflare Radar, W3Techs, May 2026 snapshot.

Geographic leaders for HTTP/3: Italy 30 %, Brazil 29 %, India 29 % — mobile-dominant markets where CDN edges push HTTP/3 aggressively because the wins on high-RTT, lossy links are real.

Key specs: RFC 9112 (HTTP/1.1) · RFC 9113 (HTTP/2) · RFC 9114 (HTTP/3) · RFC 9000 (QUIC v1) · RFC 9204 (QPACK) · Apple HLS Authoring Specification revision 2025-09 (preload hints).