

Multi-CDN Decision Checklist

Before you sign a second CDN: decide whether you even need one, pick how you switch, measure the right signals, and protect the cache the blend will dilute. Engineering guidance — confirm vendor numbers live, they change.

1 · DO YOU EVEN NEED MULTI-CDN? (one good CDN is the default)

- Tick a real trigger, or stop here.** Petabyte-per-month scale · contractual availability / unmissable live · truly global audience · an egress bill large enough that a 25-40% cost-steering saving beats the orchestration cost.
- No trigger = one CDN + an origin shield.** A single mature CDN already routes to its best PoP and gives ~99.9% on its own; a second network you do not use is complexity — and a new point of failure (the steering layer).
- Your trigger(s):** _____

2 · CHOOSE HOW YOU SWITCH (most platforms blend two)

- DNS-based (NS1, Route 53, Citrix ITM):** per-session, coarse, works for any content; slow to react mid-stream. Good for the regional split.
- Content steering (HLS / DASH — the standard):** per-segment, mid-stream; logic on a steering server, action in the player; back-compatible. Good for live correction.
- Client-side:** instant, but the logic ships inside every device build. Your chosen method(s): _____

THE ONE SANITY CHECK BEFORE YOU SIGN

Net the saving against the dilution. Cost lever: routing expensive regions to a cheaper CDN and blending to volume-commit tiers can cut total CDN spend 25-40%. Worked: 2.25 PB/month at an effective \$0.020/GB single-CDN = \$45,000/mo; a blended ~\$0.014/GB multi-CDN = \$31,500/mo — about 30% (~\$162,000/year). BUT splitting traffic across networks lowers each one's cache-hit ratio, which raises origin egress, so the true saving is the egress win MINUS any offload loss — keep an origin shield and don't over-split. Availability: one CDN at 99.9% is down ~8.8 h/year; two independent networks with fast failover reach roughly four nines (~52 min/year) in practice — a ~10x improvement, not the theoretical six. Figures illustrative; per-GB rates are negotiated, regional, and dated.

3 · MEASURE THE RIGHT SIGNALS (blend, don't trust one)

- Player QoE is the truth** (startup time, rebuffering, delivered bitrate) — from your own players or Mux / Conviva / NPAW. It is what viewers actually feel.
- Fill the gaps:** private RUM (your hostnames, 500KB+ objects) where viewers are sparse; community RUM for the long tail; CDN logs to confirm recovery before steering back.
- Beware community-RUM bias:** it times small 100KB hot objects on a setup that is not yours. Your signal mix: _____

4 · PROTECT THE BLEND (the part vendors omit)

- Each CDN caches independently — the split lowers your cache-hit ratio.** Keep an origin shield so several CDNs' misses collapse against one mid-tier cache, not your origin.
- Don't over-split, and ramp don't dump.** Two networks capture most of the win; moving ALL traffic at once just stampedes the target CDN. Shift in proportions.
- Make tokens work across CDNs** (a steered viewer must not be locked out) and accept the lowest-common-denominator feature set. Confirm: shield on? ___ token parity? ___