

Contribution vs Distribution - The Two Sides of Every Stream

Push protocols for ingest, pull protocols for delivery, and the common pairings for 2026 production workflows.

Contribution (push, one source, fragile uplink)

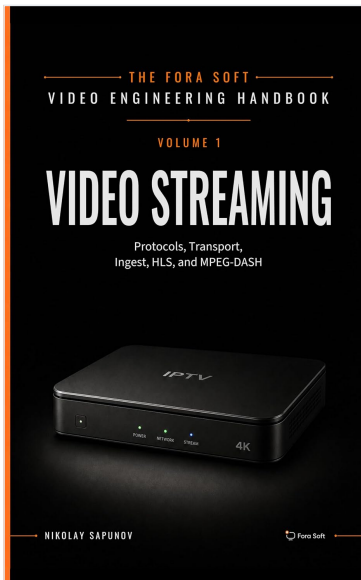
Protocol	How it moves bytes	Spec	Added latency	Notes
RTMP	TCP, port 1935	Adobe spec (2012)	+200 ms - 8 s	H.264 + AAC only; deprecated
SRT	UDP, FEC + ARQ	draft-sharabayko-srt-01	+1 - 4 s buffer	Pro broadcast over public internet
RIST	UDP, three profiles	SMPTE TR-06-1/2/3	+1 - 3 s	Broadcast-grade SMPTE standard
WHIP	WebRTC + HTTP signal	RFC 9725 (March 2025)	+100 - 500 ms	2026 default for new pipelines

Distribution (pull, many viewers, cache-friendly)

Protocol	How it moves bytes	Spec	Glass-to-glass	Notes
HLS	.m3u8 + segments	RFC 8216 (2017)	18 - 30 s	Universal compatibility
LL-HLS	200 ms parts	Apple HLS Spec 2025-09	2 - 5 s	Apple's low-latency extension
DASH	.mpd + segments	ISO/IEC 23009-1:2022	10 - 30 s	Android, smart TV, multi-DRM
LL-DASH	CMAF chunks 100-500ms	DASH-IF Low-Latency r4.3	2 - 5 s	DASH-IF answer to LL-HLS
WHEP	WebRTC egress	draft-ietf-wish-whep-03	0.2 - 0.5 s	Interactive use cases
HESP	Continuation playlist	draft-theo-hesp-04	~400 ms	THEO; niche but credible
MoQ	QUIC publish/subscribe	draft-ietf-moq-transport-17	~500 ms	Bridges the push/pull seam

Common 2026 pairings

Contribution	Distribution	Use case	Total latency	Notes
RTMP	HLS	OTT VOD-like live, news	18 - 30 s	Legacy default
SRT	HLS / LL-HLS	Pro broadcast, live sports	4 - 8 s	Industry-standard live work
WHIP	LL-HLS / LL-DASH	Modern OTT, live shopping	2 - 5 s	2026 default for new pipelines
WHIP	WHEP	Auctions, telehealth	0.2 - 0.5 s	Pure WebRTC end-to-end
RIST	HLS / DASH	Broadcaster into OTT	4 - 10 s	SMPTE interop at ingest



GO DEEPER · VOLUME 2 OF 7

Video Streaming: A Complete Guide to Video Delivery

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This map pairs push protocols for ingest with pull protocols for delivery and puts the latency of each pairing on one page. Volume 2 covers this half of the pipeline in depth: contribution over RTMP, SRT and RIST, TCP versus UDP, QUIC, the glass-to-glass latency budget, and HLS and DASH packaging.

WHAT YOU WILL FIND INSIDE

- RTMP, SRT and RIST contribution
- TCP vs UDP and congestion control
- Glass-to-glass latency budget
- HLS, DASH and CMAF packaging

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