

FairPlay Streaming — Deployment Checklist

Certificate flow, SDK 26 migration, EME and AVContentKeySession code paths, four production pitfalls.

1. Certificate request

Sprint 1, not sprint 4 — Apple review runs 2+ weeks.

Account Holder signs in to the FairPlay Streaming portal.

Apple checks: real streaming service to consumers (not agency).

On approval, generate CSR via OpenSSL; download .cer + .pem + ASK.

Two certificate slots per team — clear an old SDK 4 slot first.

2. SDK 26 migration (by Sep 2026)

RSA-1024 to RSA-2048, SPC v3 integrity protection.

Load both SDK 4 + SDK 26 certificate bundles in your KSM.

Auto-detect SPC version (v1/v2/v3) from the header.

Enable SPC v3 mandatory integrity-hash verification.

Use Apple's Swift or Rust reference KSM as a baseline.

3. HLS packaging

CMAF fMP4, cbcs scheme, dual key lines for multi-DRM.

Encrypt CMAF with cbcs (AES-128 CBC, 1:9 pattern).

EXT-X-KEY METHOD=SAMPLE-AES, KEY FORMAT=com.apple.streamingkeydelivery.

Second EXT-X-KEY line carries Widevine pssh as data: URI.

EXT-X-VERSION:6 minimum; HLS Authoring Spec 2025-09 mandates fMP4.

4. Client-side integration

Browser EME and native AVContentKeySession.

Safari EME keySystem string: com.apple.fps.1_0.

iOS / tvOS / visionOS native: AVContentKeySession.

Persistent license? Pass storage + playback duration in CKC.

Track playback start in the app — Apple gives no remaining-time API.

Pitfalls — KSM side

What goes wrong on the server.

Cert review slipped. Apple review > 2 weeks — start sprint 1.

Wrong RSA size. SDK 26 = RSA-2048, SDK 4 = RSA-1024. KSM auto-detects.

SPC integrity skipped. Silently accepts tampered SDK 26 SPCs.

CKC policy missing. Right HDCP flag + rental duration; otherwise 480p.

Single key for all renditions. Use multi-key packaging per ladder.

Pitfalls — client side

What goes wrong in the browser or the app.

EME key system off. Use com.apple.fps.1_0, not com.apple.fps.

MEDIA_ERR_SRC_NOT_SUPPORTED + KSM -42676. EME config bug, not server.

MPEG-TS for new content. Authoring Spec 2025-09 requires CMAF.

No offline-clock UI. No API for remaining persistent-license time.

Manifest signals only Widevine. Safari sees no FPS line, refuses to play.