Roku Build & Certification Spec Sheet — One-Page Reference

Roku is the #1 US streaming platform and its own closed world. Settle these before you scope a Roku build. Engineering guidance; Roku OS, certification criteria, and vendor capabilities change — confirm against the current Roku developer docs.

1 · THE STACK (Roku-only)

- ☐ **BrightScript + SceneGraph** — a Roku-only language and XML UI framework; web/iOS/Android code does not transfer.
- ☐ **SDK channel only** — the no-code Direct Publisher route was removed in January 2024.
- ☐ **Thin tooling** — no first-party full IDE; most teams use the community VS Code extension.
- ☐ **Plan a dedicated team** — the skill is useful on one platform; train or hire BrightScript devs.

2 · CERTIFICATION (hard numbers)

- ☐ **App size ≤ 4 MB** — a bloated bundle of images and fonts will not certify.
- ☐ **Launch ≤ 15 s**, screen change ≤ 3 s, remote ≤ 250 ms, content start ≤ 8 s.
- ☐ **Test the weakest model** — measured on Streaming Stick+ / Premiere+, not a Roku Ultra.
- ☐ **Deep linking required** — Roku search must Direct-to-Play a title inside your app.

3 · DRM + CONTENT PROTECTION

- ☐ **Widevine (HLS, DASH) + PlayReady (Smooth, DASH)**; AES-128 clear-key on HLS.
- ☐ **DASH = common ground** — it carries both studio DRMs from one package.
- ☐ **Native BrightScript, not W3C EME** — DRM wired on the video node (keySystem, licenseServerURL).
- ☐ **No FairPlay (Apple-only)**; HDCP 2.2 on 4K devices, 1.4 on others; Verimatrix removed in OS 9.3.

4 · MONETIZATION

- ☐ **RAF mandatory for ad apps** — pre/mid/post-roll; beacons fire client-side to certify.
- ☐ **SSAI still routes beacons through RAF** — adapters: uplynk, adobe, onceux, yospace, awsemt, ggldai.
- ☐ **Roku Pay is the only billing** — sign-up, payment, entitlement; no third-party paywall.
- ☐ **Revenue share 80/20** — $9.99 sub → $7.99 to you, $2.00 to Roku; price it in from day one.

THE TEST — ROKU IS ITS OWN WORLD

Roku is the most-used connected-TV platform in the US — 100M+ households and ~44% of CTV streaming hours — so a Roku app is rarely optional for an American audience. But everything about it is Roku's: a proprietary BrightScript language and SceneGraph UI that share no code with your web or mobile builds, a store reached only through a full SDK channel, a certification gate with hard performance numbers measured on a cheap stick, DRM wired natively rather than through the browser's EME, and advertising and billing that must run through Roku's own RAF and Roku Pay. The reach is unmatched and so is the lock-in: budget a separate codebase and a dedicated team, fit the 4 MB and latency limits on the weakest device you support, package DRM over DASH, and build Roku's 20% cut into your pricing before the first sprint. The test of a Roku plan: it treats Roku as a platform with its own language, gate, and money rules — not as a port of the app you already have. Re-verify the certification numbers and Roku OS DRM versions against the current Roku developer docs before each build.



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This sheet covers the Roku stack, certification numbers, DRM and monetization rules before you scope a build. We wrote seven volumes on the video stack. Volume 3 covers players, DRM and ad insertion, Volume 2 covers HLS and DASH packaging, and Volume 1 covers encoding ladders for TV devices.

WHAT YOU WILL FIND INSIDE

- Players, DRM and ad insertion
- Encoding ladders for weak devices
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