

# DRM Systems & Device Coverage Worksheet

Map the devices you must reach to the DRM systems and security levels your build needs — before you write player code or sign a content deal. No single DRM covers every device; reaching every screen lands on all three. Engineering guidance; confirm vendor capabilities live, they change.

## 1 · LIST YOUR TARGET DEVICES (tick every screen you must reach)

- Apple** — Safari, iPhone, iPad, Mac, Apple TV.
- Android & Google** — Android phones/tablets, Chromecast, Android TV.
- Browsers** — Chrome, Firefox, Edge, Opera (desktop = software level).
- Windows & console** — Windows apps, Microsoft Edge, Xbox.
- TVs & sticks** — Samsung Tizen, LG webOS, Roku, Amazon Fire TV.

## 2 · READ OFF THE REQUIRED DRM (device → system)

- Apple anything** → **FairPlay** only. No substitute — Apple allows nothing else.
- Android, Chrome, Fire TV, PlayStation, most TVs** → **Widevine**.
- Windows, Edge, Xbox, set-top boxes, many TVs** → **PlayReady**.
- Tizen / webOS / Roku** → Widevine OR PlayReady (most ship both).
- Reach every screen?** → all three (multi-DRM). Required combo: \_\_\_\_\_

## THE ONE RULE THAT MAKES IT AFFORDABLE

Encrypt once, license many. With the cbcs scheme of Common Encryption (ISO/IEC 23001-7) you protect ONE set of files — CMAF-packaged — and issue Widevine, PlayReady, or FairPlay licenses from them depending on which device shows up. Storage and encoding do NOT triple; you add three license endpoints and per-device testing, plus a small per-license fee. Modern Widevine and PlayReady both support cbcs, and FairPlay requires it, so 'cbcs everywhere' is the convergence target. Carry one rule into every packaging job: standardize on cbcs, or you will rebuild your pipeline the first time an iPhone shows a black screen.

## 3 · SET THE SECURITY LEVEL & RESOLUTION (hardware vs software)

- Hardware-backed (TEE)** = Widevine L1 / PlayReady SL3000 / FairPlay on Apple silicon → HD, 4K, HDR.
- Software-only** = Widevine L3 / PlayReady SL2000 → commonly capped near SD (~480p) by the license.
- Desktop browsers are L3/SL2000** — expect the web player to be SD for premium titles.
- Check the license:** if 4K needs hardware DRM, your software devices simply won't get 4K.

## 4 · AVOID THE THREE CLASSIC MISTAKES

- Building against one DRM** (usually Widevine in Chrome) → black screens on every iPhone. Start from the device map.
- cenc-only encryption** → silently breaks FairPlay. Standardize on cbcs from day one.
- Ignoring security levels** → surprised by the resolution cap. Treat the level as a fact about each device.