

ExpressPlay multi-DRM service— DRM client compatibility



DRM compatibility overview

The Intertrust ExpressPlay multi-DRM service is compliant with, and conforms to, the specifications for Microsoft PlayReady, Apple FairPlay Streaming, Google Widevine Modular, and Marlin DRMs.

It is important to note that maintaining client compatibility and compliance with a given DRM schema is the sole responsibility of the device maker. In other words, the working assumption of the ExpressPlay Multi-DRM Service is that the receiving device has a fully compliant implementation of the DRM schema that the service operators intend to use.

The ExpressPlay Multi-DRM Service supports the following DRMs:

DRM	Server version deployed by ExpressPlay multi-DRM service
Apple FairPlay	FairPlay Streaming SDK v4.3
Google Widevine	Widevine Modular
Microsoft PlayReady	PlayReady Server SDK v4.0.5117
Marlin DRM	Marlin MS3 1.4 and Marlin Broadband





A note on Marlin DRM on Android and iOS devices

Android supports Google Modular Widevine native DRM on Android version 4.4 and above. On earlier Android versions, as well as on some manufacturers' devices, Google Widevine is not available natively. In such cases, the **ExpressPlay Binary SDK for Android** can be integrated into a native application to ensure playback of protected HLS and MPEG-DASH content even on devices that do not support a native DRM.

iOS devices that support Apple FairPlay DRM require content to be streamed in HLS format with either MPEG2-TS with SAMPLE-AES encryption, or HLS with fMP4 with AES-CBCS. As in the Android case, the **ExpressPlay Binary SDK for iOS** can be integrated into a native application to ensure playback of protected HLS and MPEG-DASH content on iOS devices.

In general, the benefits of using the **ExpressPlay Binary SDK** are the following:

- Provides a secure implementation of the Marlin DRM for iOS and Android
- Allows a service provider to stream HLS and DASH-CENC to both iOS and Android
- Supports both streaming and download scenarios (persistent licenses)
- Supports jailbreak and root-device detection
- Can be integrated in an IPTV client to which content is delivered via multicast

ExpressPlay Source SDK is also available for CE devices such as STBs and smart TVs. In this case the SDK takes advantage of a device's Trusted Execution Environment (TEE) to meet the requirements for UHD content consumption. In the case of smart TVs, the ExpressPlay security client is fully integrated into the TEE of the TV set. This eliminates the need for STBs or other external security hardware such as CAMs, thus reducing the total cost of ownership (TCO).

DRM compatibility per client type

Smart TVs/Connected TVs

Smart TV brand	FairPlay Streaming	Microsoft PlayReady (porting kit)	Widevine Modular (native DRM client)	Marlin DRM (ExpressPlay Source SDK / porting kit)
Samsung (Tizen) models 2017-2018+	●	●	●	●
Samsung (Tizen) models 2015-2017	●	●	●	●
Samsung (Orsay) models 2010-2015	●	●	●	●
Smart TV Alliance: LG, Philips, Toshiba, Panasonic	●	●	●	●
Sony TV	●	●	●	●
Roku TV	●	●	●	●

Set-top boxes and streaming (casting) devices

STB & streaming	FairPlay Streaming (native DRM client)	Microsoft PlayReady (porting kit)	Widevine Modular (native DRM client)	Marlin DRM (ExpressPlay Source SDK)
Chromecast	●	●	●	●
Android TV	●	●	●	●
Roku	●	●	●	●
Apple TV	●	●	●	● ¹
Amazon Fire TV	●	●	●	● ¹

1. ExpressPlay Binary SDK

Mobile support—DRM clients

OS	FairPlay Streaming (native DRM client)	Microsoft PlayReady	Widevine Modular (native DRM client)	Marlin DRM (ExpressPlay Binary SDK)
Android (4.4+)	●	●	●	●
Android (4.0-4.3)	●	●	●	●
iOS (9+)	●	●	●	●



Desktop browser support—DRM-compatible HTML5 media player

Browser	FairPlay Streaming (native DRM client)	Microsoft PlayReady (native DRM client)	Widevine Modular (native DRM client)	Marlin DRM
Chrome	●	●	●	●
Firefox	●	●	●	●
Internet Explorer	●	●	●	●
Microsoft Edge	●	●	●	●
Safari	●	●	●	●

Mobile browser support—DRM-compatible HTML5 media player

Browser	FairPlay Streaming (native DRM client)	Microsoft PlayReady (native DRM client)	Widevine Modular (native DRM client)	Marlin DRM
Chrome for Android	●	●	●	●
Firefox for Android	●	●	●	●
Microsoft Edge for Android	●	●	●	●
Safari for iOS	●	●	●	●

Industry standards / specifications

Industry standard	FairPlay Streaming	Microsoft PlayReady	Widevine modular	Marlin DRM
TNT (2.0+) ²	●	●	●	●
HbbTV (1.5+)	●	●	●	●

2. Télévision Numérique Terrestre - Digital Terrestrial Television (France):
A TNT 2.0 terminal may be a TV set, STB, a DVD/Blu Ray player/
recorder or any other terminals equipped with a TNT Tuner

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