intertrust®

Secure Offline Streaming

Quick Guide

Media Solutions

ExpressPlay DRM™

marlin

Introduction

There are environments with limited access to the internet that prevent users from accessing streaming content. Such limitations can be location-based, for example a hospital or an oil platform, where existing policies may impose on users and their devices. Other environments with limited or no internet access are often transportation related, where access issues arise on trains, buses, airplanes, and automobiles.

The difficulties of providing streaming content across a wide range of scenarios to a vast array of devices is compounded by the need to protect content and correctly manage access. This need can be addressed with the use of a digital rights management (DRM) system.

The ExpressPlay DRM Offline secure streaming solution offers a multi-DRM platform that fully complies with limited access environments, yet allows authorized users to have access to premium, rights managed content. Marlin DRM is a widely used content protection solution that is offered as part of the ExpressPlay DRM Offline system.

Secure content distribution in a closed environment

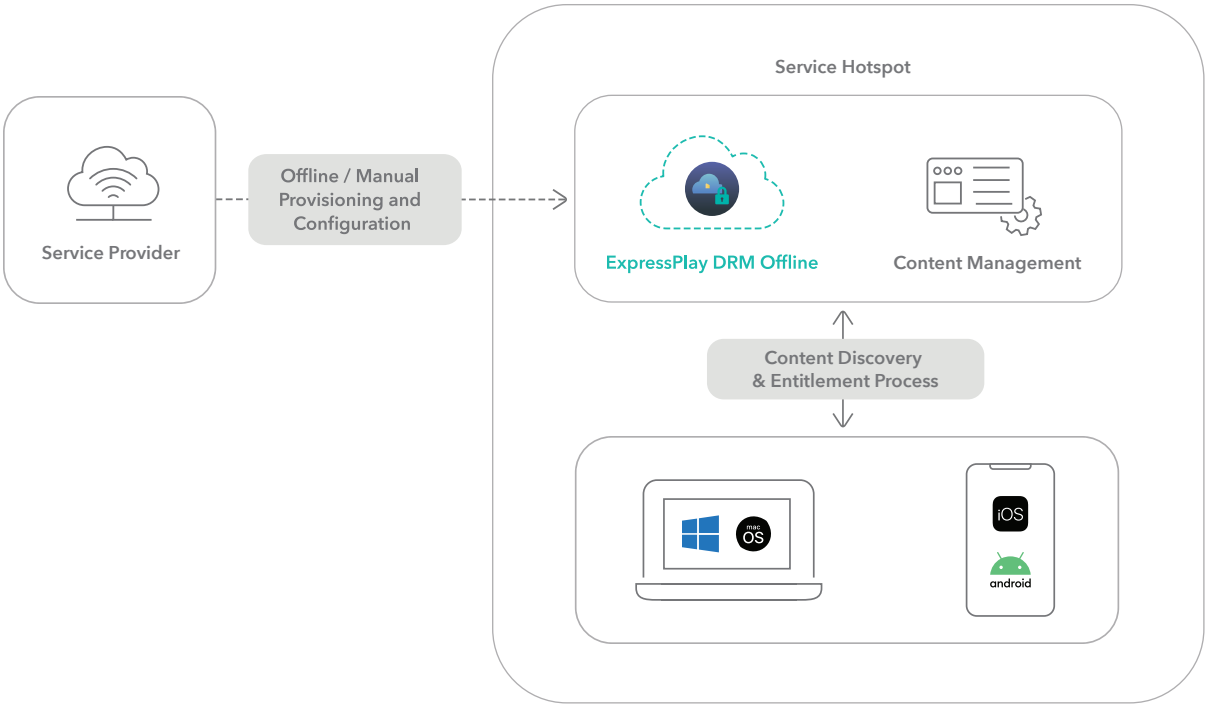
Let's assume a closed environment is a physical place that has limited or no internet connectivity. An end-to-end solution is required for providing premium protected content within this space. However, there are two challenges for service operators:

- How to gain access to the content, and
- How to acquire the associated content DRM licenses

When internet access is available the device requesting the content has a direct connection to the service provider infrastructure and can rely on a cloud-based multi-DRM service. In a closed environment a different approach is needed.

There are two scenarios to consider depending on the nature of the closed environment:

- **Hot Spot:** No internet connection is available within the closed environment
- **Gateway:** Internet connection is available through a dedicated proxy that only allows connection to one type of service



FairPlay Streaming

marlin

WIDEVINE

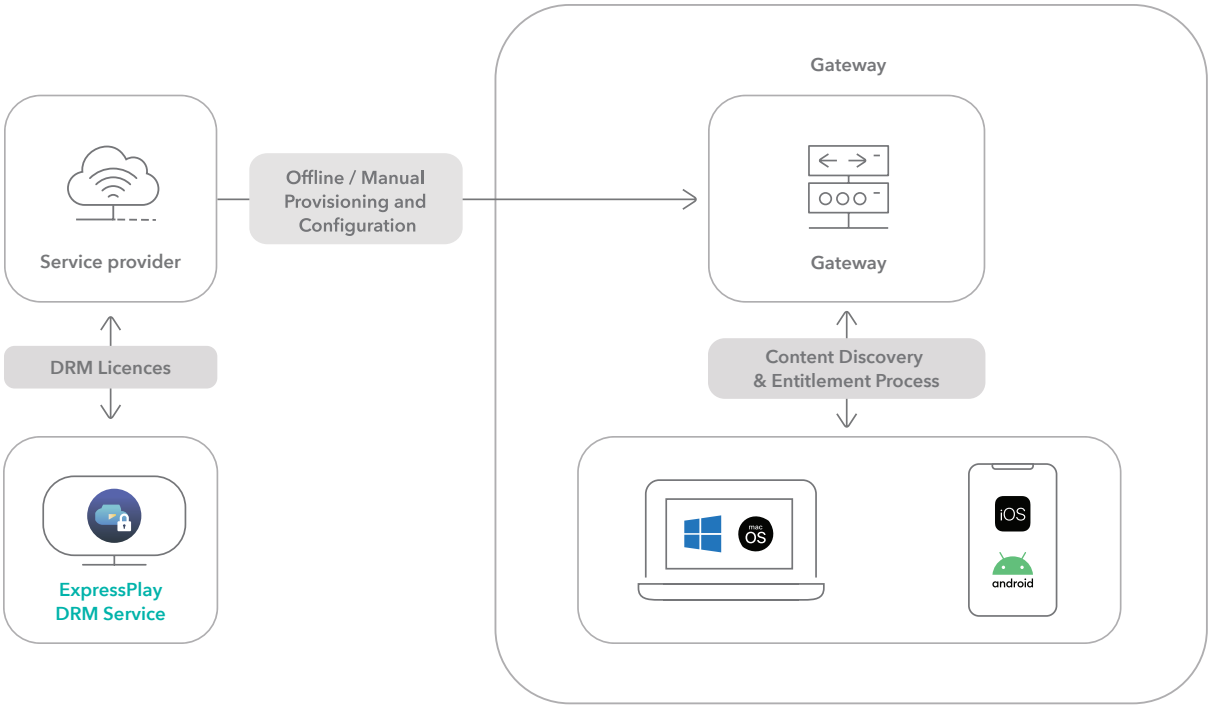
Hotspot approach

In this scenario the users get access to protected content via dedicated hotspot devices that replicate the entire service stack: content discovery, content delivery and an offline DRM server.

ExpressPlay DRM Offline enables service providers to deploy a multi-DRM solution in a closed environment supporting secure streaming to devices equipped with Apple FairPlay Streaming, Google Widevine Modular, and Marlin DRM clients. The service provider simply integrates the ExpressPlay DRM Offline servers with the service stack via a dedicated set of service APIs exposed by ExpressPlay DRM Offline.

This approach allows service providers to use the service stack that they already have in place. Users can access protected content on a variety of clients such as dedicated native apps as well as web applications including HTML5 browsers.

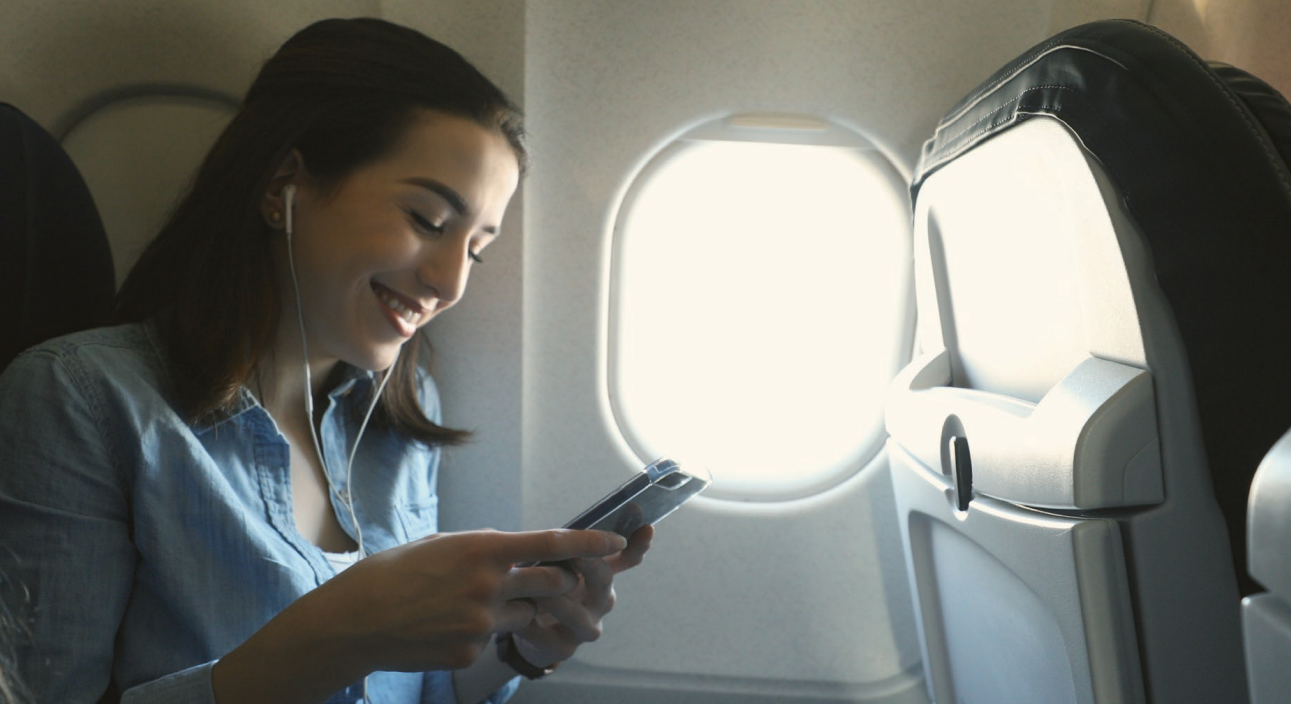
Alternatively, a service provider can license the award-winning Kiora technology from Intertrust that offers a turnkey solution featuring end-to-end content management, a multi-DRM rights issuer and a mobile client SDK. The Kiora Entertainment Everywhere platform integrates secure content delivery with local Wi-Fi video streaming supporting all common mobile devices and browsers. Kiora is ideal for offline transportation use cases (such as planes and trains), and is also suited for hospitality applications including hotels, hospitals, military bases and oil platforms. Kiora provides a cloud management platform to remotely manage and distribute content without the need for upstream connectivity at time of user playback.



Gateway approach

In this scenario users access protected content via a dedicated gateway that connects to an external service. Typically a gateway connection restricts users to only one service and does not allow access to other external service(s) or permit web browsing.

The ExpressPlay DRM service supports such a gateway approach, which enables users to play protected content from a specific service. In this case the service provider requests DRM licenses for specific target devices without the device/app having to contact the cloud-based multi-DRM service itself.



Dedicated devices

Some environments present additional restrictions and will lock down dedicated devices to a given service. While it can be difficult to provide content and license delivery in this scenario, the ExpressPlay DRM binary SDK combined with Marlin DRM domain functionality provide the answer.

The solution works by pre-configuring the devices with a specific device-user key that is requested from the ExpressPlay Cloud Service. The service provider then requests Marlin DRM persistent licenses that are bound to that specific device-user key always via the ExpressPlay Cloud Service. The distribution of licenses and content are performed in this manner. It is important to note that once a device has been configured with the necessary keys (e.g. Marlin device personality and user key), it does not need to have a return channel back neither to ExpressPlay nor to the service provider servers. From this point on the content and the licenses can be pushed to the device as needed.

The combination of ExpressPlay DRM binary SDK and the Marlin DRM domain functionality brings the following benefits: it easily allows both content download and secure streaming mechanisms and it can be supported on devices that do not support any native DRM.

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Building trust for the connected world.

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