

DRM Expertise



- **Client side DRM applications**
 - **Implement CPIX Specification**
 - **DRM key management Server to support different players**
-
- Download protected content and its license for offline playback
 - Client SDK for protected video playback on Web, Android, iOS and tvOS
 - Implement CPIX Specification compliant DRM key delivery mechanism
 - Implement Key delivery of encryption keys for Widevine, FairPlay and PlayReady DRM



Scope:

Download protected content and its license for offline playback

Challenge:

1. Support download of DASH and HLS content for offline playback.
2. Handle large downloads with resume option.
3. Enforce proprietary playback rules.

Solution:

1. Developed custom download manager leveraging platform-specific functionality.
2. Support for iOS and Android Devices.

Outcome:

Successfully added the download and offline playback feature in the OTT Client SDK.

Client:

Mediakind

Industry:

Digital Media Streaming

Technology Service:

OTT Client SDK



Client:
MobiTV

Industry:
Digital Media Streaming

Technology Service:
OTT Client SDK

Scope:

Client SDK for protected video playback on Web, Android, iOS and tvOS

Challenge:

Common API supporting protected playback on all supported platforms

Solution:

1. Support DASH and HLS playback
2. Unified DRM key handling for Proprietary, Widevine, PlayReady, FPS and Apple Native
3. Support VOD, catchup, ongoing & completed recording and live playback
4. Integrated players like, HTML5, JWPlayer, ShakaPLayer, DashJS, AVPlayer, and ExoPlayer

Outcome:

Client SDK supporting playback of protected assets streamed from MobiTV backend.



Client:
Mediakind

Industry:
OTT Media Delivery

Technology Service:
OTT backend DRM Support

Scope:

Implement support for CPIX Specification compliant DRM encryption key delivery mechanism

Challenge:

1. Implement an industry standard best practice mechanism for Key exchange between Packager, Key Management Service, Player and DRM License servers.
2. Backward compatibility with existing use cases.

Solution:

1. Use CPIX (Content Protection Information Exchange Format) standard to parse incoming key requests consisting of information like stream type, DRM standard, Key rotation etc.
2. Maintain the parsed information in an efficient custom designed class and data structures with efficient accessibility.
3. Generate encryption keys using the received information and subsequently recreate the CPIX document to be sent as a response from the Key management system.

Outcome:

A generic Key Management System (KMS) that can respond with keys to any packager using the CPIX Open standard.



Client:
Mediakind

Industry:
OTT Media Delivery

Technology Service:
OTT Backend DRM Support

Scope:

Implement Key Rotation mechanism for delivery of encryption keys for Widevine, FairPlay and PlayReady DRM

Challenge:

1. Static DRM keys for media are vulnerable to being hacked in case of any security breach.
2. This compromises the entitlements based on individual subscriptions.
3. Need to find a way to safeguard media playback of live channels under all situations.

Solution:

1. Implementation of key rotation based on certain intervals.
2. This applies to multiple DRM types such as Widevine, FairPlay and PlayReady.
3. This significantly reduces the chances of compromising the media playback; irrespective of the client device.

Outcome:

1. Secure OTT playback with keys refreshing at certain intervals.
2. In case of security breach, the situation get rectified automatically without any requirement to manually change the keys in the database.