

# A Playing-Tool for DRM-Assets

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## Problem Statement

Add a DRM-asset playback functionality to the existing console  
(DRM: **D**igital **R**ights **M**anagement)

## Objectives

- Deep dive about the technology and stacks for designing the application.
- Finalize the minimal functional requirements and features.
- Integrate with an open source HTML5 audio/video streaming library supporting **MPEG-DASH**.
- Integrate it with Amazon's internal service APIs to fetch manifest file and license.

## What is MPEG-DASH?

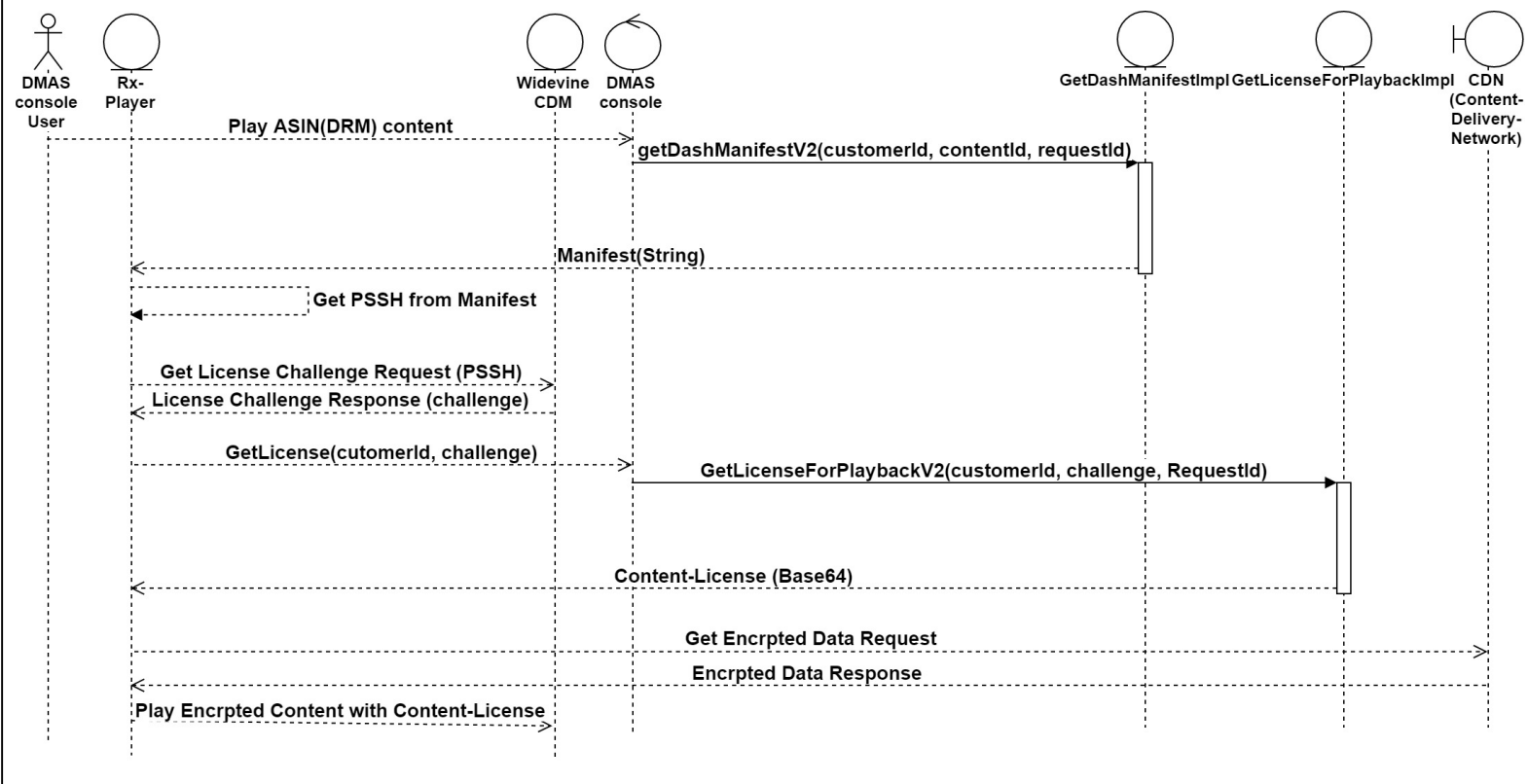
- DASH - Dynamic Adaptive Streaming via HTTP
- International open standard, developed and published by ISO
- Addresses both simple and advanced use-cases
- Enables highest-quality multiscreen distribution and efficient dynamic adaptive switching
- Enables reuse of the existing content, devices and infrastructure
- Attempts to unify to a single standard for the HTTP Streaming

## HTML5 Media Streaming Libraries

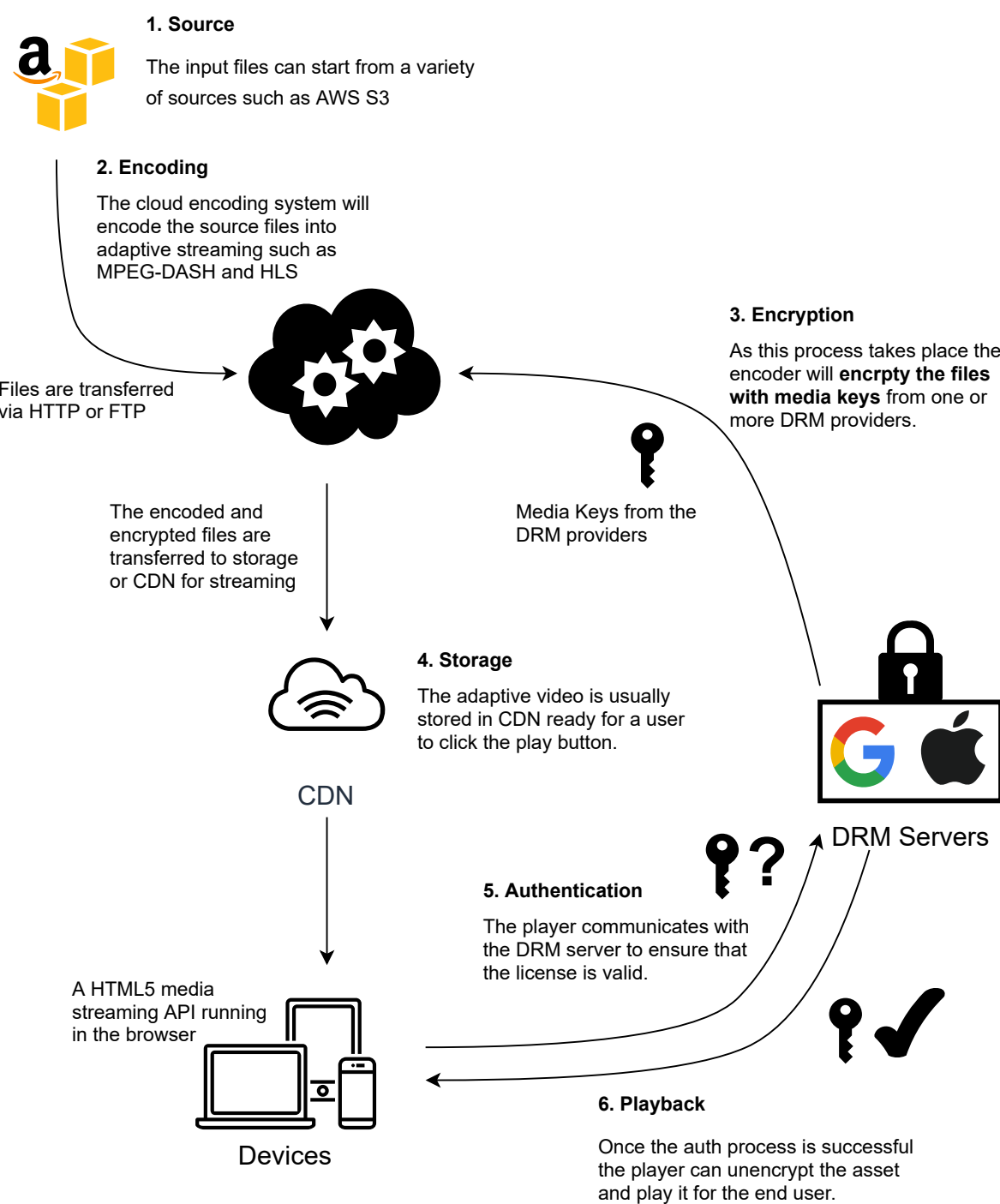
- A JavaScript which relies on HTML5 [Media Source Extensions](#) and [Encrypted Media Extensions](#)
- Plays adaptive media formats such [DASH](#), [HLS](#), Microsoft Smooth Streaming in a web browser
- DRM configuration and License Wrapping is supported for **License-Fetching**.
- We have 3 feasible open-source media player for our use-cases as follows:

Name	Remarks
<a href="#">Dash.js</a>	<ul style="list-style-type: none"> <li>• Supports only DASH</li> </ul>
<a href="#">Shaka-Player</a>	<ul style="list-style-type: none"> <li>• Supports both DASH and HLS</li> <li>• XHR requests are made by player itself</li> </ul>
<a href="#">Rx-Player</a>	<ul style="list-style-type: none"> <li>• Support both DASH and Microsoft Smooth Streaming</li> <li>• Whole license fetching logic is written by user including XHR requests</li> </ul>

## Sequence Diagram



## How does DRM work?



## Code-base Design

