



## FAMIUM MULTI-DRM

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Microsoft  
PlayReady®

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### Interoperable content protection for Internet delivered video

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Digital Rights Management (DRM) and adaptive streaming are key factors for premium Internet-delivered video. FAMIUM Multi-DRM uses a common DRM-interoperable encryption, the Common Encryption (CENC) standard. It supports multiple DRM systems and license servers.

For browser-based clients, the FAMIUM Content Decryption Module (CDM) & Content Decryption Module interface (CDMi) solution implement the W3C Encrypted Media Extensions (EME) specification to enable playback of protected content in the browser, using plugin-free HTML5 technology. They interact with the platform's hardware-assisted DRM system and ensures a secure integration into a browser environment.

Key facts:

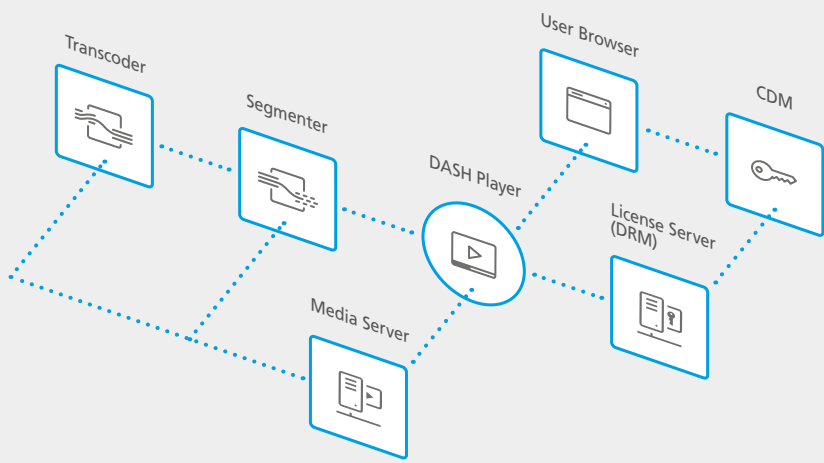
- Multi-DRM backend for PlayReady®, Widevine® and Fairplay®
- DRM-independent Open Source CDM implementation (OCDM)
- CDM and CDMi for Microsoft® PlayReady®
- Based on standards (DASH, HLS, CENC, EME, CDMi, CPIX)

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### FAMIUM Transcoder & Segmenter

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FAMIUM Transcoder & Segmenter implement content packaging of adaptive streaming media content (MPEG DASH and HLS). They feature Multi-DRM and CENC support, allowing content providers to stream from a single media format. The FAMIUM Transcoder & Segmenter support on-the-fly transformation for multiple platforms and different DRM systems – instead of storing each media format separately.



Digital Rights Management (DRM) is a key factor for Internet-delivered video. Using the Common Encryption (CENC) standard, a common DRM-interoperable encryption is used, to support multiple different DRM systems.

## FAMIUM Multi-DRM

Playout platforms and devices support different DRM solutions, so today's media streaming ecosystem needs a Multi-DRM backend. Leveraging CENC, FAMIUM encrypts content once and adds DRM-specific data to the media stream. The FAMIUM Multi-DRM solution supports DASH-IF CPIX (Content Protection Information Exchange Format) for interoperable and secure key exchange between DRM license servers.

## FAMIUM CDM & CDMi

A CDM is required for DRM in HTML5-based browser environments using EME. Fraunhofer FOKUS maintains the 'Open Content Decryption Module' (OCDM), an open source project on GitHub. The implementation enables DRM interoperability and has been integrated with Chromium, Opera and Microsoft PlayReady.

## At a glance

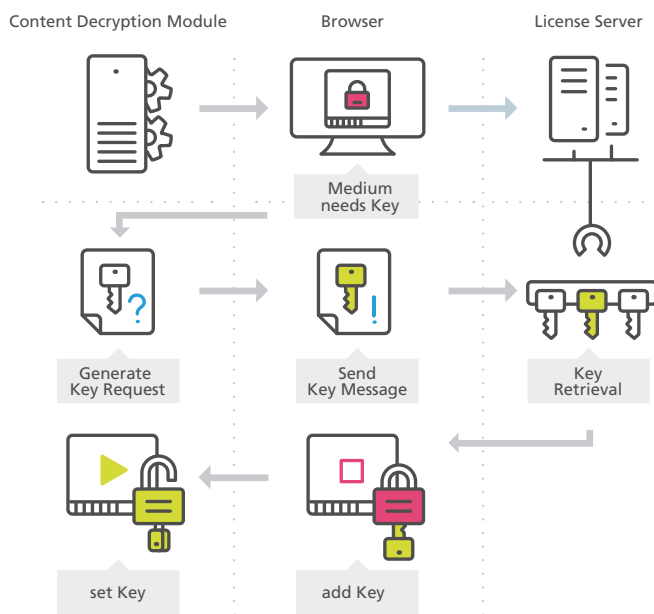
FAMIUM bundles several DASH and DRM related functionalities for use in Web applications. It leverages W3C standards Media Source Extensions (MSE) and Encrypted Media Extensions (EME), MPEG standards Dynamic Adaptive Streaming over HTTP (DASH) and Common Encryption (CENC). The implementation features a Microsoft® PlayReady® CDM built by Fraunhofer FOKUS.

## What is FAMIUM?

FAMIUM facilitates multi-screen content presentation and synchronization, adaptive media streaming and content protection. It is an end-to-end prototype implementation for early technology evaluation and interoperability testing, developed by the Fraunhofer FOKUS Business Unit for Future Applications and Media (FAME).

## References

OCDM GitHub project:  
<http://s.fhg.de/ocdm>



CDM communication flow with the Web browser and license server to acquire a license for media decryption

