Secure **Decryption** with KMS Integration

Introduction

Secure, scalable, and efficient decryption is essential for real-time video monitoring and analysis. TAG Video Systems integrates with Key Management Systems (KMS) to support DRM and CAS-compliant decryption in OTT and broadcast environments.

Key Benefits

- **Seamless KMS Integration**: Connects directly with leading KMS providers, eliminating complexity while ensuring secure content delivery without additional DRM dependencies.
- **Broad Format & Protocol Support:** Fully compatible with AES-128 (CBC/CTR), BISS-2, CENC, and DVB Simulcrypt formats, ensuring flexibility across broadcast, IPTV, and OTT workflows.
- **Scalable Deployment:** It runs efficiently in cloud, hybrid, and on-prem environments, allowing dynamic scalability without commercial off-the-shelf (COTS) hardware- no proprietary hardware appliances are needed.
- **Optimized Performance & Efficiency:** Designed for high-throughput decryption with minimal processing overhead, reducing operational costs and maximizing resource utilization.
- **Real-Time Monitoring & Compliance:** Enables deep probing of encrypted streams for instant fault detection, reducing downtime and ensuring regulatory compliance.
- **Multi-Use Case Compatibility:** Supports live and VOD content, ensuring a consistent, reliable experience for broadcasters, operators, and content providers.
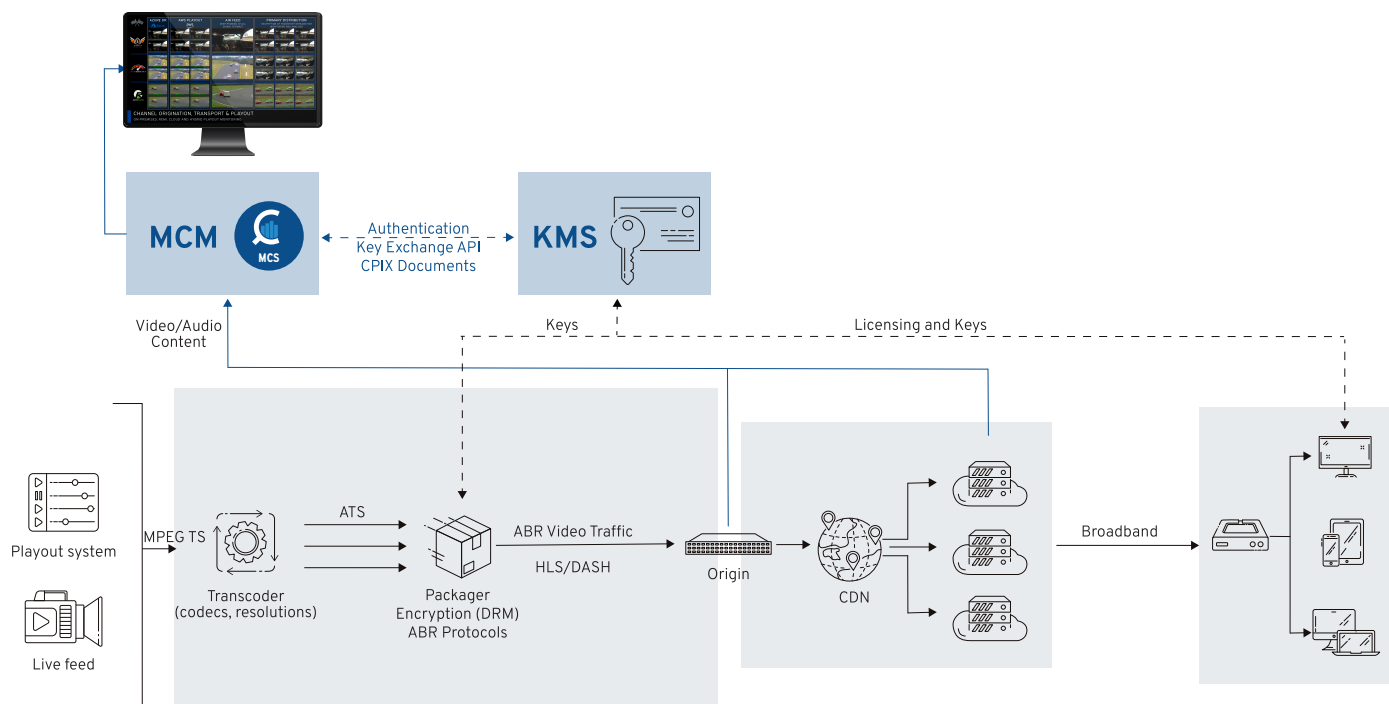
Figure 1 - KMS Integration

Technical Specifications

Supported Encryption & Decryption Standards

‣ AES-128 (CBC, CTR)

‣ BISS-2 Encryption

‣ Common Encryption (CENC) for Multi-DRM

‣ DVB Simulcrypt Support (ECM, EMM-based CA Systems)

Integrated KMS Partners

‣ Verimatrix, Irdeto, SKY CKS, Huawei PlayReady, Axinom, buyDRM, Kaltura UDRM,

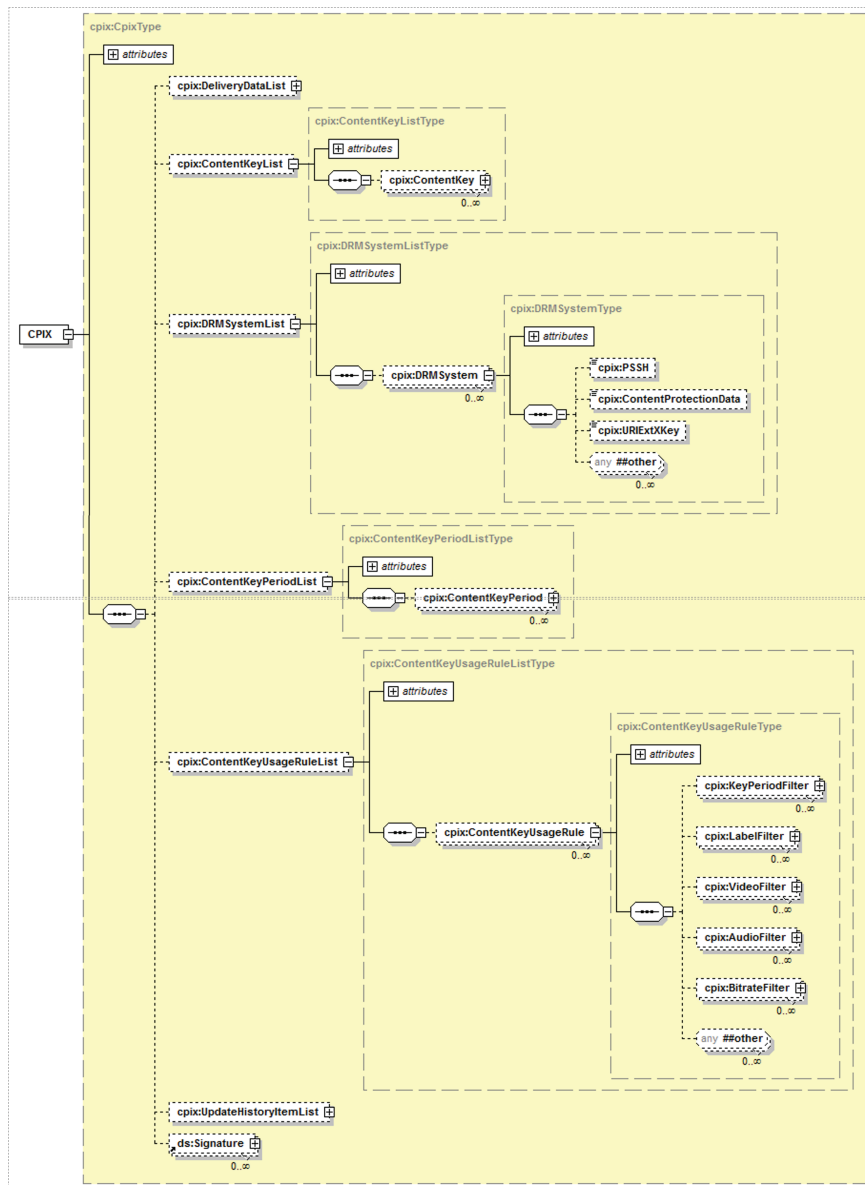‣ and others.

CPIX support for secure, dynamic key exchange.

Figure 2 - Content Protection Information Exchange Format - High-level View[1]

Optimized for Key Workflows:

Workflow	How TAG Enhances Decryption
Live & VOD OTT Streaming (HLS, DASH)	Securely decrypts adaptive bitrate content in real-time
IPTV & DVB Simulcrypt Deployments	Ensures smooth multi-network decryption with minimal latency
Multi-Cloud & Hybrid Architectures	Deploys flexibly across private, public, and hybrid cloud setups

Diagram from September 6, 2016 – DASH-IF Implementation Guidelines: Content Protection Information Exchange (CPIX) Format, DASH Industry Forum, v2.0

Scalable Video Encryption Management

TAG's decryption technology provides an efficient and scalable way to monitor and manage encrypted video content without adding complexity to your workflow. The system is designed to integrate seamlessly with existing security frameworks, enabling secure and efficient content delivery while maintaining real-time visibility.

This solution removes traditional barriers by eliminating the need for additional DRM infrastructure, reducing operational friction, and allowing seamless deployment across cloud, hybrid, and on-prem environments. The built-in monitoring and visualization capabilities enhance operational efficiency by ensuring compliance, minimizing downtime, and supporting diverse encryption standards.

TAG
VIDEO SYSTEMS

www.tagvs.com