# Sigma Packaging & Origin

## Sigma Packaging & Origin

is a video delivery system that allows video providers to securely and reliably distribute streaming video. It makes it easy to prepare your live content for delivery to multiple devices, and improve the viewer experience with advanced features. Customers can reduce workflow complexity, increase origin resiliency, and better protect multiscreen assets without the risk of under or over-provisioning video infrastructure. System also works with other Sigma service to unlock the growing ecosystem of connected devices and the dynamic viewing experiences they enable.

## Why should you use our Service?

### Reduced CAPEX and OPEX

Cost savings CAPEX & OPEX when integrating sigma ott system using software deployed based on microservice model

### It is safe

Absolutely safe with Multi-DRM content **protection**

### High User Experience

Live, Timeshift TV, StartOver TV ... increase User Experience. It make easier for viewers to discover the content

## Key Feature

- **Cost Efficiency - Reduce Server or Storage Requirement**
- **Massive Thoughput and speed**
- **Absolutely safe with Multi-DRM content protection and watermarking**
- **Support Multi ABR Formatting like HLS, DASH**
- **Ultra Low Latency mode increase User Experience**
- **Extra Origin Feature: Timeshift TV, StartOver TV, Catchup TV**

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## Input

| | |
|---|---|
| **Input Format** | **Adaptive transport stream (ATS)**<br>**GOP-aligned, H264 or H265 encoding** |
| **Network** | **IPv4 Multicast for Live Ingest (IGMPv2/v3 support)** |

## Processing

| | |
|---|---|
| **ABR Formatting** | **Apple HTTP Live Streaming (HLS over CMAF or TS)**<br>**MPEG DASH** |
| **Subtitling** | *Closed Captions*: **WebVTT for HLS, WebVTT or SMPTE-TT for DASH**<br>*DVB-Teletext*: **WebVTT for HLS, WebVTT or SMPTE-TT for DASH**<br>*DVB-Subtitles*: **SMPTE-TT for DASH** |
| **Content Protection** | **Microsoft PlayReady DRM support for HLS, Smooth Streaming and DASH Apple Segment and Fairplay support for HLS**<br>**Widevine, Playready support for DASH using CENC**<br>**Key provisioning interface to leading CAS & DRM vendors** |
| **Low Latency** | **Apple HLS Low Latency**<br>**DASH LL-CMAF** |

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# Origin

| | |
|---|---|
| **Feature** | **Linear Channel**<br>**Timeshifting**<br>**Start over TV** |
| **Storage** | **Support Local storage, NAS, NFS**<br>**Object storage (s3, ceph ...)**<br>**Ram Disk for Linear Channel** |
| **Network** | **IPv4 Multicast for Live Ingest (IGMPv2/v3 support)** |
| **CDN compatible** | **CDN pulling support** |
| **Manifest Filtering** | **Support HLS, DASH Manifest filtering** |

# Monitor & Control

| | |
|---|---|
| **High Availability** | **N+M failover (active-standby at least N+1)** |
| **Interface** | **Web GUI management Interface** |
| **Mantenance** | **Manual / Schedule** |

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