

# APIs to <mark>encode</mark> play & analyze video



Prepare your content at high speed and the lowest bitrate. Deliver content in the highest quality. All while optimizing your video workflows for scalability and reliability using Bitmovin's next-gen VOD Encoder.

#### HIGH QUALITY

Improve the quality of experience for all your viewers with our <u>Per-Title encoding</u>. It automatically analyzes each video and creates the ideal adaptive bitrate ladder (ABR).

In addition, with our <u>multi-codec</u> <u>streaming</u> approach, you can match codecs to browsers dynamically with 50% bandwidth savings or more and deliver the best quality possible based on the viewers' browser.

Speaking of codecs, we pioneered cloud implementations of <u>AVI</u> and <u>VVC</u> codecs, making 4K and HDR video possible at lower bandwidths (<700kbps!).

Besides supporting multiple HDR and immersive audio formats, we are the first <u>Dolby Pro Partner</u> to integrate Dolby Vision and Dolby Atmos in the cloud.

#### EASE OF USE

Our next-gen VOD encoder enables quality focused features such as Per-Title, HDR, multi-pass, AV1 to be implemented in minutes.

<u>Simple Encoding API</u> delivers the best video experience with little to no configuration.

Encoding jobs can run on AWS, GCP, or Azure within Bitmovin's managed cloud or on <u>your own cloud</u> resources. Spikes in demand and large batches of content run quickly and efficiently in the cloud. And you pay only for resources used.

Forrester's <u>Total Economic Impact™</u> <u>Study</u> found that Bitmovin's Encoding solution delivered a 355% ROI over the course of three years. Offering the optimal balance between quality, performance, and cost.

#### ALWAYS INNOVATIVE

Recognized with a <u>Technical Emmy</u> <u>Award</u>, Bitmovin pushes the entire industry forward while making the latest advancements easy to use.

Per-Title Encoding + 3-Pass Encoding = Best Quality of Experience (QoE) for viewers and lower Total Cost of Ownership (TCO) by 30%. Now possible with one simple API call.

Per-Shot Encoding takes it to the next level. Beta tests indicated up to 20% savings when using Per-Title and Per-Shot encoding compared to using traditional fixed segment lengths.

Experience Super-Resolution with machine-learning based upscaling that prepares and boosts the quality of SD content for 4K screens.

#### "What was particularly impressive was that Bitmovin performed well with all types of videos."

– Jan Ozer, Streaming consultant and author of 'Choosing a Per-Title Encoding Technology'

#### Support and community matters - plans tailored to your business and workflow

Bitmovin helps guide developers through integration, launch, upgrades, and optimizations. Starting with easy-to-use products, documentation, and a global community. Our team of video experts provides a range of options to meet your exact needs, from starter packages to enterprise plans with dedicated account management, including feature implementation & 24/7 Slack support and special event monitoring.

## Start your trial today

# Features and capabilities supported

INPUT FORMATS
MPEG-1 Video
MPEG-2 Video
MPEG-4 Video
H.261
H.262
H.263
H.264/AVC
H.265/HEVC
VP6
VP8
VP9
DNxHD
Theora
XDCAM
XDCAM HD22
XDCAM IMX
DV
DVCPRO
DVCPROHD
ProRes
AVCHD
AVCIntra
Cineform HD
Intel Indeo
JPEG2000

#### INPUT FILE FORMATS

MP4	
MKV	
MOV	
AVI	
FLV	
MPEG-2 TS	
MPEG-2 PS	
MXF	
LXF	
GXF	
3GP	
Webm	
MPG	
QuickTime	
WMV	

### LIVE INPUTS

Redundant RTMP
Zixi
SRT (Caller and Listener mode)
Live ad cue-point insertion

#### INPUT AUDIO CODECS

AAC
MP3
DTS Express
FLAC
WMA
Vorbis
PCM
WAV
Dolby Atmos (DAMF and ADM)
Dolby Digital (AC3)
Dolby Digital Plus (E-AC3)

#### DRM

Widevine
PlayReady
Marlin
FairPlay DRM with HLS
DASH ClearKey encryption
SAMPLE-AES, AES-128 encryption (HLS)
Multi-DRM
Forensic Watermarking

## CLOSED CAPTION AND SUBTITLES

WebVTT
CEA-608/708
SRT
TTML (EBU-TT, SMPTE-TT, IMSC)
SMPTE-TT
Burn-in Subtitles

## MACHINE LEARING

Object Detection Super Resolution

#### FILTERS

Motion Adaptive Deinterlace
Denoise
Crop/Scale/Rotate
Watermarking
Audio Mixing
Unsharp Masking
Text Overlay

#### STREAMING PROTOCOLS

MPEG-DASH
Apple HLS
Progressive MP4
Smooth Streaming

#### OUTPUT AUDIO CODECS

AAC-LC
HE-AACv1
HE-AACv2
MP2
MP3
DTS Express, DTS:HD, DTS:X
Vorbis
Opus
Dolby Atmos
Dolby Digital
Dolby Digital Plus

#### OUTPUT VIDEO CODECS

MPEG-2 Video (XDCAM HD 422)
MPEG-4 Video
H.264/AVC
H.265/HEVC
VP8
VP9
AV1
VVC

#### OUTPUT FILE FORMATS

MPEG-2 TS
MP4
fMP4
MOV
WebM
CMAF
MXF (XDCAM HD 422)

#### SUPPORTED STORAGE

AWS S3
Google Cloud Storage
Azure Blob
Generic Object Storage
FTP
SFTP
HTTP/HTTPs
Akamai NetStorage
Aspera
Akamai MSL4 Support

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