

SOFTWARE-AS-A-SERVICE



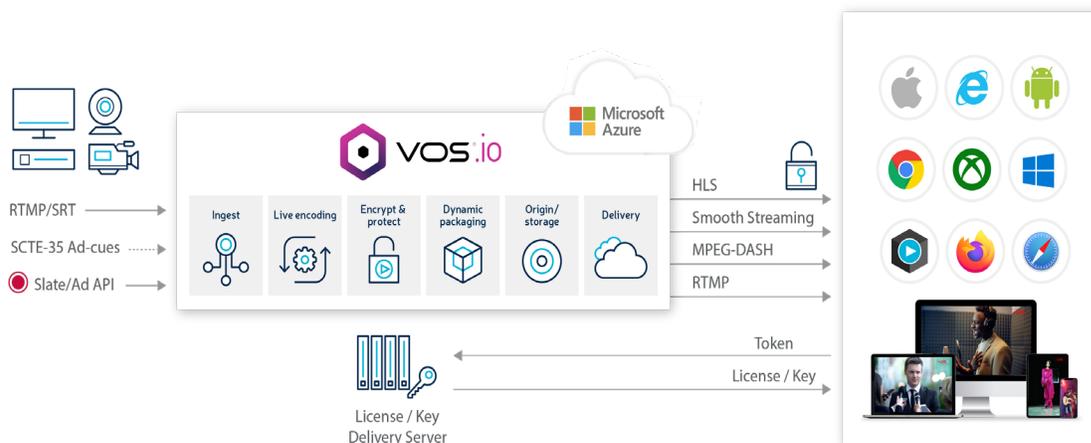
## VOS<sup>®</sup>.io allows you to create, encode and live stream media services at scale on Microsoft Azure Cloud.

Based on Harmonic's industry-leading VOS solutions, VOS.io is a video streaming platform for the enterprise market. VOS.io enables enterprises to create and stream video content directly to intended audiences. Part of the Microsoft Azure ecosystem, VOS.io ensures unparalleled agility, resiliency, security and scalability for a superior streaming experience.

VOS.io simplifies media processing and offers key functionalities including live streaming, VOD encoding, content protection, as well as dynamic packaging and origin. The platform is easy to set up and requires minimal effort to operate. By using the web interface or simple API, enterprises can start streaming in just a few minutes. The platform's flexible SaaS business model allows users to only pay for what they use.

VOS.io is an ideal solution for a variety of live video streaming applications, sporting events, concerts, press conferences, and corporate events directly to your audience, at scale. Real-time scaling, studio-quality encoding and other advanced features on VOS.io enables live events to be delivered reliably and at scale.

In addition, VOS.io supports multi-channel, multi-language audio; HDR video; and SRT to assure secure, high-quality streaming.



## HIGHLIGHTS

- Simplify all stages of the media processing and delivery chain to deliver directly to your audience
- Unrivalled quality, providing exceptional live encoding efficiency with AI-based technologies with EyeQ™ content-aware encoding with low latency
- Launch revenue-generating, supreme quality OTT services in minutes
- Designed for easy, secure accessibility with high resiliency
- Ensures superior quality of experience and service availability
- Template-based workflows for rapid and consistent configuration
- Tiered, usage-based pricing

## KEY BENEFITS

**Handle your video and audio content delivery with cloud-based workflows.** Use advanced video encoding and crystal-clear streaming services to reach your audience, anywhere. And benefit from safe, secure content at every level. All while helping your bottom line thanks to EyeQ encoding.

**Deliver your video services, simply.** Get your streaming media services where they need to be with an easy-to-use user interface (UI) on a single workflow. VOS.io makes your content available online, fast with a minimum amount of API calls, and with market-leading encoding.

**Create engaging, high-quality streaming experiences.** Effortlessly deliver your live and file streaming content across a range of client technologies including HTTP Live Streaming (HLS), MPEG-DASH and Smooth Streaming. With built-in support for HTML5, media source extensions and encrypted media extensions, Harmonic's VOS.io ensures enriched, adaptive cloud streaming experiences that captivate your audience.

**Scale media services to hit your audience targets.** Live broadcast sporting events, concerts, press conferences, and corporate events directly to your audience, at scale. Harmonic's VOS.io handles audiences of any size while allowing you to control how and when viewers watch your media services.

## CAPABILITIES

**Live events streaming:** Stream live services for the duration of the event whether it be sports, concert or corporate events, with superior quality of experience and service availability.

**Dynamic packaging:** Deliver existing assets and package-on-the-fly with your own storage accounts in HLS, Smooth Streaming and MPEG DASH streaming protocol formats and eliminate the need for extra processing and time.

**Linear TV streaming:** Ingest, process, and stream a linear channel direct to end users, with powerful live archiving capabilities.

**File-to-stream:** Transcode media files to target the format with efficiency and high-quality.

**Content protection:** Deliver your live and on-demand content encrypted dynamically with Advanced Encryption Standard (AES-128) or any of the three major digital rights management (DRM) systems: Microsoft PlayReady, Google Widevine, and Apple FairPlay.

## SPECIFICATIONS

### INGEST

|   |   |
|---|---|
| Live ingest for transcoding                                 | Includes compressed TS (MPEG-2 and AVC) sources, up to HD   |
| Multi-bitrate TS live ingest for packaging (no transcoding) | Compressed TS AVC and HEVC sources. The streams can be received over internet (SRT). RTMP live inputs |
| Audio codecs  | AAC, AC3  |
| Data  | Close caption, Teletext<br>Harmonic's ViBE® CP9000 and XOS can be used to ingest signals.             |

### TRANSCODING

|                                       |  |
|---------------------------------------|--|
| Harmonic PURE Compression Engine™     | Advanced transcoding technology supports SD, HD formats, and MPEG-4 AVC and HEVC codecs for OTT delivery, providing groundbreaking video quality at the lowest possible bit rates and latency.   |
| Harmonic EyeQ™ content-aware encoding | Offers consistent, superior video quality for OTT services, with up to a 50 percent reduction in bandwidth. This technology is built with artificial intelligence techniques to achieve better video quality at a lower bit rate and higher density. |
| Multiple audio channels encoding      | Perfect support for multi-language application.  |

### PACKAGING

Optimize storage and ease upgrades with the addition of new packaging features. All formats are supported so that your content can be seen on virtually any device or social platform.

SCTE-35 annotations for DAI (Dynamic AD Insertion) application.

### ENCRYPTION

Multi-DRM solutions for protecting your pay TV, OTT, and hybrid platforms.

DRM for OTT, including FairPlay and PlayReady for HLS, Widevine and PlayReady for MPEG-DASH, MPEG-CENC for CMAF (MPEG-DASH + HLS), and PlayReady for HSS.

### ORIGIN

Delivers the full range of storage and bandwidth scalability expected from cloud-based deployments.

Integrating VOS.io origin with a third-party CMS solution is simple thanks to the VOS API, which comes with online documentation and samples.

### DELIVERY

Prepare and distribute content to your audience in a single platform.

Stream your VOD content, linear channels or live events directly to your app.

VOS.io provides CDN services to keep it simple.