

Harmonic Leverages Zixi for Reliable and Cost-Effective Transport of Live Video Across its VOS360 Platform

ZIXI-INTEGRATED IN VOS360 LIVE STREAMING PLATFORM

AT A GLANCE

FEATURED HARMONIC SOLUTIONS WITH ZIXI INTEGRATION

VOS[®]360 Live Streaming Platform

– makes live streaming simple. It leverages the flexibility of cloud infrastructures to meet the most demanding and complex requirements for media processing and delivery.

It runs on a wide range of public cloud platforms all over the globe.

It powers millions of simultaneous streams, thousands of live channels, countless video on demand requests and hundreds of petabytes of storage and delivery.

Using Zixi transport technology, any live video content can be ingested and distributed reliably and securely from or to any location in the world with Harmonic's VOS360 Live Streaming platform.

KEY BENEFITS:

- **All in the Cloud** – VOS360 is built around docker containers and microservices using Kubernetes orchestration. It offers a rich API and a range of easy-to-use features accessible through a user interface.
- **Powerful workflows** – End-to-end capabilities simplify all stages of the media processing and delivery chain. Receive content at the source and transfer to the cloud, then right to the viewer's screen
- **Advanced DevOps** – Your live streaming channels are fully managed, 24/7. Your services are supported with the highest level of availability and reliability.

THE FLEXIBLE CLOUD-BASED MEDIA PROCESSING SOLUTION

Pay TV operators, broadcasters and greenfield OVP providers require reliable, yet cost-effective IP-based content ingest and distribution solutions that are easy to deploy and manage.

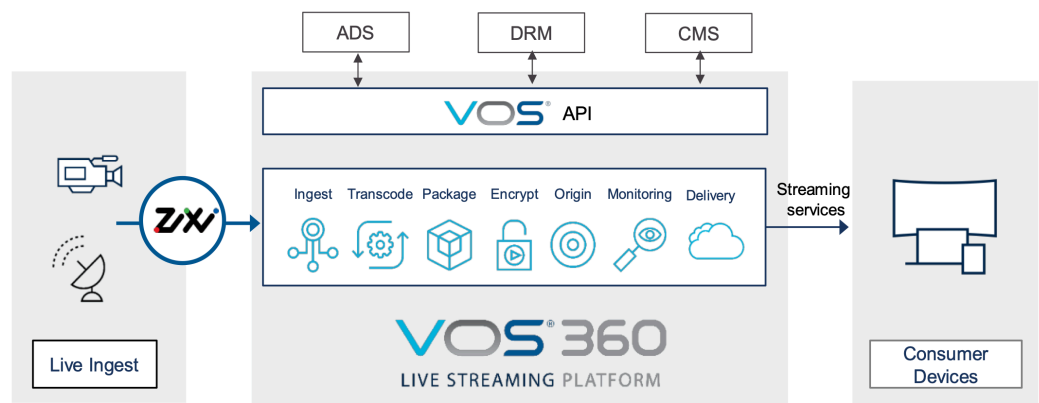
Whether used for live, VOD xCoding, packaging, delivery, time-shift TV, or nPVR applications, Harmonic offers a fully managed media processing and delivery platform, based on best-in-class cloud-native technologies. Zixi's integration into VOS360 Live Streaming Platform allows content contributors and distributors to easily and reliably scale their video transport to hundreds of outlets around the world.

OUTSTANDING SCALABILITY FROM SOURCE TO SCREEN

A SaaS offering running off a global public cloud infrastructure, Harmonic's **VOS360 platform** helps content creators and service providers easily launch revenue-generating, broadcast-quality OTT channels in a matter of minutes. The VOS360 solution features six media processing microservices: ingest, transcoding, encryption, packaging/origin, monitoring and delivery.

To protect the content in transit throughout its delivery chain, Harmonic's VOS360 cloud infrastructure features integrated Zixi receivers that can receive Zixi-protected sources.

ZIXI INTEGRATED IN VOS360 LIVE STREAMING PLATFORM





KEY ZIXI BENEFITS

- **Security** – Zixi provides best-in-class security enhanced with DTLS and AES standards-based protection
- **Reliability** – Contribute source streams with 99.999+% broadcast reliability; hitless failover provides redundant transmission options for higher reliability and disaster recovery
- **Low Latency** – With network adaptive Forward Error Correction and recovery, proven sub 1 second live linear latency
- **Interoperability** – Zixi is compatible with the largest ecosystem of encoding devices and contribution sources
- **Centralized Management** – ZEN Master provides a centralized view of the entire Zixi enabled contribution and distribution network

ENSURING RELIABLE TRANSPORT OVER PUBLIC INTERNET WITH ZIXI

Zixi transport uses a combination of congestion-aware and network adaptive forward error correction, error recovery, bonding of multiple transmission paths and dynamic feedback to control encoder bitrate, all at a minimal latency and with the security of AES-128/256 or DTLS.

With minimum overhead to physical bandwidth, this dynamic mechanism removes jitter, recovers and re-orders packets, smooths video delivery enabling the streaming of broadcast-quality video over any distance, while overcoming the varying network conditions of unmanaged IP networks including the public Internet.

ZIXI-PROTECTED INGEST & DELIVERY WITH VOS360 LIVE STREAMING

As part of its managed service solution Harmonic integrates Zixi into its entire media processing chain by featuring Zixi receivers that can receive Zixi-protected sources.

ADDING LIVE CHANNELS WITHIN A FEW CLICKS

Adding live channels in VOS 360 is a simple and straight-forward process. Simply select a source type (e.g. Zixi), a transcoding profile, optional time shift, logo, blackout slate, etc., and you are ready to go.

ABOUT HARMONIC

Harmonic (NASDAQ: HLIT), the worldwide leader in video delivery technology and services, enables media companies and service providers to deliver ultra-high-quality broadcast and OTT video services to consumers globally. Whether simplifying OTT video delivery via innovative cloud and SaaS technologies, or powering the delivery of gigabit internet cable services, Harmonic is changing the way media companies and service providers monetize live and VOD content on every screen. Visit www.harmonicinc.com

ABOUT ZIXI

Zixi provides the cloud based and on-premises Software-Defined Video Platform (SDVP®) that enables reliable broadcast-quality video delivery over any IP network, any protocol, any cloud provider and any edge device. The company offers technologies for broadcasters, enterprises, over-the-top video providers, sports leagues, service providers, cable operators and Telcos around the world, giving them the lowest TCO in the industry. Many of Zixi's clients are delivering and managing thousands of streams, and there is no other alternative in the market that can provide 99.999%+ reliability at scale. Zixi simplifies building and managing congestion-aware live video routes on any network, with support for 18-protocols across any operating environment, with products that are purpose built to provide market leading performance, universal interoperability and an operational control plane that simplifies management and orchestration at scale. With 15+ years of innovation and expertise, the Zixi Enabled Network has grown to over 1000+ media customers and 400+ OEM and service providers that deliver 20,000+ channels daily, with 110,000+ deployed instances in over 120 countries, gathering over 9 billion data points a day while delivering over 100,000 live sporting events a year. This powerful ecosystem of the largest media organizations in the world exchanging live video allows for the creation and acceleration of new content acquisition, business models, and opportunities to reduce cost and generate revenue. www.zixi.com | sales@zixi.com