

Teleos Media Leverages Zixi to Offer the World's First Delivery Network, Built Specifically for Video

WORLD'S FIRST ZIXI-INTEGRATED VIDEO DELIVERY NETWORK

AT A GLANCE

TELEOS MEDIA SOLUTIONS WITH ZIXI INTEGRATION

- **TrueLIVE** - Delivers the highest quality live video online along with the lowest latency in the industry, going Glass-to-Glass in 15-seconds. Change the channel, and the new stream starts instantly.
- **iBROADCASTER** - Simple to use channel authoring online service with broadcast features. Launch unlimited micro channels by mixing VOD, Live, AD and Promotional assets and deliver TV-like channels.

KEY FEATURES:

- **Faster Starts** - Under 2 seconds video startup times.
- **No Buffering** - Uninterrupted high bit-rate delivery.
- **Actually Live** - Lowest latency in the industry.
- **Infinitely Scalable** - Cloud infrastructure that automatically scales.
- **End-to-End Control** - Monitor, manage, orchestrate contribution and delivery of live video from one central interface



A VIDEO DELIVERY NETWORK FOR A FLAWLESS VIDEO EXPERIENCE

Content owners, broadcasters, operators, and distributors require a scalable and cost-effective way to process and distribute live, on-demand and linear live video in multiple formats for viewing on multi-screen devices around the world. However, traditional CDNs experience bottleneck that causes high video start times, increased buffering, and higher latency on live video.

Teleos Medias' capture, process, and distribution solutions enable live, and the launch of broadcast-quality linear live video channels with simplicity, scalability, and flexibility.

Teleos Media has partnered with Zixi to create a Video Delivery Network (VDN) that enables continuous un-interrupted streaming video content in the highest bitrate. Together, Teleos Media and Zixi enable a high-quality delivery solution for anyone who wants to monetize content and deliver a flawless user experience

TELEOS MEDIA SOLUTIONS WITH ZIXI INTEGRATION

TrueLIVE: Low-latency high-quality live streaming video

Teleos Media's TrueLIVE streaming solution, delivers outstanding low-latency and a crystal-clear high-definition picture (even 4K@60Fps) on any scale. TrueLive allows the ingest of live vide feeds in any format from any location, guaranteeing "glass-to-glass" delivery in less than 9 seconds from capture to delivery, while enabling rapid provision of live events within minutes.

iBroadcaster: Simple-to-use channel authoring

Teleos' iBroadcaster is an easy to use channel authoring solution that provides simple tools to create and broadcast linear live stream channels, including stitching of content, ads insertion, bumpers, promotions and stream scheduling.



KEY ZIXI BENEFITS

- **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
- **Security** – Zixi provides best-in-class security enhanced with DTLS and AES standards-based protection
- **Interoperability** – Zixi is compatible with the largest ecosystem of encoding devices and contribution sources
- **Centralized Management** – ZEN Master can provide a centralized view of the entire Zixi-enabled contribution and distribution network

ABOUT TELEOS MEDIA

Teleos Media empowers anyone with video content to be a broadcaster, using the most advanced, glass-to-glass Video Distribution Network available. The Teleos Media team consists of visionaries with several decades of expertise in engineering and business marketing from a variety of companies, including: Google, Informix, Microsoft, Sun, HP, IBM, Verisign, Dish Networks and Move Networks. We've developed practical and cost-effective solutions for video distribution.

<https://www.teleosmedia.com/sales@teleosmedia.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

BEST-IN-CLASS RESILIENCY FOR BROADCAST QOS

Teleos Media solutions integrate the following Zixi software components to ensure best-in-class resiliency:

- **Zixi Feeder** receives MPEG-TS over IP from an encoder or is integrated directly into an encoder or DCM and embeds the data into Zixi protocol to send to the Broadcaster.
- **Zixi Broadcaster** receives multiple feeds, either in Zixi protocol or in MPEG-TS over IP. The Zixi Broadcaster then provides the feeds it receives to a number of Zixi Receivers.
- **Zixi Receiver** requests the data from the Broadcaster, converts the Zixi protocol back into MPEG-TS over IP, and sends that out over a network interface or is integrated directly into a decoder device.

The flow from Zixi Feeder input to Zixi Receiver output is transparent for MPEG-TS packets.

ENSURING RELIABILITY AND LOW LATENCY WITH ZIXI

Zixi transport uses a combination of congestion-aware and network adaptive forward error correction, error recovery, congestion avoidance, 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.

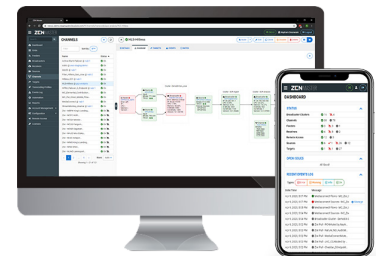
With minimum overhead to physical bandwidth, this dynamic mechanism removes jitter, recovers and re-orders packets, smooths video delivery enabling the streaming of broadcast-quality video over any distance, while overcoming the varying network conditions of unmanaged IP networks including the public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

Zixi offers robust hitless failover capabilities, which include a patent-pending DNA like re-sequencing algorithm. This unique technology enables hitless failover between identical encoded streams from multiple contribution points with missing packets.

SIMPLE STREAM CONFIGURATION, ORCHESTRATION & MONITORING WITH ZEN MASTER

As a ZEN Master Certified partner, Teleos Media's solutions are integrated with **ZEN Master**, Zixi's cloud-based control plane that enables live video orchestration and stream management at scale by providing control over large complex network environments. This cloud-based interface provides visual and automated tools to configure, manage, and monitor live broadcast channels at scale and across industry protocols.

With ZEN Master, Teleos Media customers can provision, orchestrate and deploy multi-party video supply chains and provides vast amounts of telemetry across the entire supply chain of iBroadcaster, TrueLIVE and other Zixi integrated devices.



Zixi's ZEN Master UI