

Integration of Zixi's SDVP[®] Powers Ultra Low Latency and Cost-Effective Contribution for Broadcast Applications

MEDIAKIND BEAM'S POWERFUL CONVERGED EDGE PROCESSING PLATFORM LEVERAGES ZIXI SDVP INTEGRATION

HIGHLIGHTS

MEDIAKIND BEAM PLATFORM WITH NATIVE ZIXI INTEGRATION

Beam serves as MediaKind's comprehensive solution for all aspects of contribution, distribution and cloud edge processing, ensuring the consistent delivery of high-quality content with optimal resource efficiency.

AT A GLANCE:

- Cloud-native media software infrastructure
- CE1 & RX1 Processing appliances with high efficiency
- Features an optimized form factor with flexible density
- Utilizes hardware acceleration
- Maintains a low energy footprint
- Offers comprehensive connectivity
- Hardware can be repurposed for various workflows
- Mitigates cloud processing costs at the edge
- Facilitates edge transcoding or regionalized content distribution
- Native integration with the Zixi Protocol

The escalating adoption of remote production and the integration of cloud-based video production tools pose a challenge in effectively transmitting high-quality video and audio into the cloud over unmanaged IP links with reliability and acceptable latency. Moreover, any viable solution must be cost-effective and operationally straightforward.

This integrated offering of MediaKind and Zixi enhances the capabilities of service providers, operators, content owners, and broadcasters by enabling access to a global Zixi Enabled Network allowing them to acquire new content, reach more audience and opens up new business opportunities. This improvement is directed towards acquiring and dynamically delivering high-quality content, thereby guiding viewers toward truly exceptional experiences.

ADVANCED SOLUTIONS FOR MODERN USERS TO ADDRESS PRESENT DAY CHALLENGES

MediaKind's Beam consolidates all current functionalities of Video Contribution and Distribution, expanding its scope to include cloud edge processing for the delivery of pristine video quality with maximum efficiency. Meeting the demand for consistent high quality at scale necessitates operational simplicity, extensive configurability, seamless integration with cloud production workflows, all while maintaining superior video quality at low latency.

Beam serves as MediaKind's comprehensive solution, encompassing contribution, distribution and cloud edge processing, ensuring the continuous delivery of premium-quality content with maximum resource efficiency. Crafted from a modular software architecture, Beam addresses traditional contribution and distribution models and provides the necessary IP connectivity for transmitting live video from ground to cloud and vice versa, thereby enhancing functional diversity and quality within cloud production workflows.

Features and Use Cases:

- 1. Live Event Coverage:** Beam is commonly used in the context of live event coverage, particularly when cloud-based production tools are employed, facilitating the seamless provision of live video and audio feeds into the cloud-based production system.
- 2. Remote Commentators/Experts:** In scenarios where commentators or experts are not physically present at the event venue, the Beam platform enables them to contribute live video and audio content to the cloud-based production system. This remote contribution is crucial for ensuring dynamic and engaging event coverage.



3. Video and Audio Compression: Beam handles the compression of video and audio content, optimizing for efficient transmission over the network. This is essential for conserving bandwidth and ensuring the smooth delivery of high-quality content, especially in live event scenarios where real-time performance is paramount.

4. Security Measures: Beam incorporates robust security features to safeguard the contribution link, which is crucial for protecting the integrity and confidentiality of the transmitted content, especially in high-profile live events where security is a priority.

5. Error Protection: To ensure a reliable contribution link, Beam incorporates error protection mechanisms that mitigate the impact of network errors or disturbances, enhancing the overall reliability of the live video and audio feeds during the event coverage.

6. Reliability: Beam's design prioritizes reliability, offering a dependable solution for contribution links. This is essential in live event scenarios where any disruptions or failures in the contribution link can have a direct impact on the viewing experience.

7. Integration with Cloud Production Workflows: Beam seamlessly integrates with cloud production workflows, aligning with the broader trend of utilizing cloud-based tools in media production. This integration enhances flexibility and scalability, allowing for efficient and collaborative production processes, even with remote contributors.

TRANSPORT BROADCAST QUALITY CONTENT AT ULTRA LOW LATENCY OVER PUBLIC NETWORKS AND CLOUD

Beam's native integration of Zixi SDVP platform enables streaming to a Zixi Broadcaster, supporting Zixi Zen Master for monitoring and stream configuration. Zixi integration is facilitated through the advanced stream processing license on MediaKind Beam appliances, except for the CE Mini, where it is available as a standard feature. When activated, Zixi becomes one of the selectable output stream protocols during product configuration for live content contribution.

MediaKind's integration with Zixi allows for high-quality encoding and delivery of content at ultra-low latency over any IP network, including unmanaged Internet connections. This capability is particularly crucial for mission-critical applications such as Esports, live news gathering and high-profile entertainment events.

The MediaKind Beam platform offers encoding, decoding and transcoding in various form factors to provide ultimate flexibility. Leveraging the Zixi protocol ensures reliable and error-free live content delivery over any IP network, with the added benefit of up to 50% packet loss recovery.

By utilizing Zixi's ZEN Master control plane, users gain the ability to orchestrate, monitor and manage the Beam platform globally through a single interface. This centralized control facilitates easy system-wide access, enhancing the overall operational efficiency. Employing Zixi for reliable contribution over the Internet enables content providers to seamlessly transfer content to the cloud, or transmit it back to a central location for production purposes.

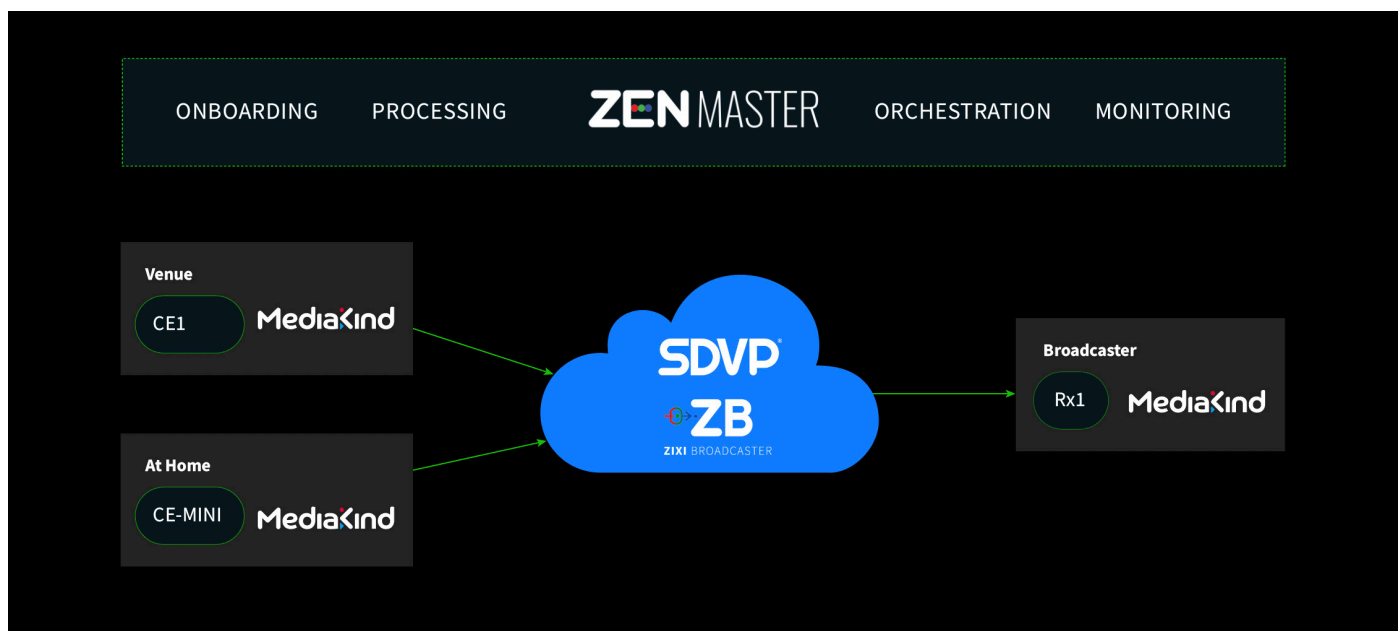
SECURE CONTRIBUTION THROUGHOUT THE ENTIRE WORKFLOW UTILIZING ZIXI

MediaKind's integration of Zixi into the platform allows content creators and distributors to leverage Zixi's industry leading video over IP technology proven with over 15+ years of experience and trusted by over 1000+ media customers in 100+ countries to deliver and contribute video to and from global markets via the cloud, and take advantage of unique features such as:

- **Bonded Delivery**
Combines disparate topologies including 5G, LTE, Leased Lines and Unmanaged Internet, dynamically adjusting for fluctuating bandwidth, network congestion, packet loss and latency differences
- **Network Efficiency**
Reduces egress costs up to 30% - 50% when compared to other protocols
- **Compute Efficiency**
Reduces compute costs up to 50% by utilizing highly efficient ARM based processors
- **Connection Validation**
Industry leading security including DTLS connection security and content encryption

- **Sequenced Hitless Failover**
An improvement on SMPTE 2022-7, applies Zixi optimized alignment algorithms to re-create a single coherent uninterrupted stream out of multiple stream fragments
- **Reliability**
Enhanced stream resilience with congestion aware routing and patented dynamic forward error correction (FEC)
- **Quality Optimized Delivery:** Quality optimized delivery with content aware bandwidth shaping

FLEXIBLE EDGE OPTIONS FROM MEDIAKIND BEAM WITH INTEGRATED ZIXI SDVP



ABOUT MEDIAKIND

At MediaKind, we are trailblazers in the video technology landscape, empowering over 2,000 global service providers, operators, content owners, and broadcasters. Our award-winning video technology sets a new bar for quality of experience, and our commitment to innovation and excellence has been driving the media and entertainment industry to new heights for three decades, while our cutting-edge solutions deliver unmatched viewing experiences across linear, on-demand, and OTT services. As a catalyst for live entertainment and an Emmy award-winning leader, we remain a trusted partner in shaping the future of media and entertainment worldwide. For more information, please visit: www.mediakind.com | sales@mediakind.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