Global Cloud-Based Live Video Delivery with AWS and Zixi

The Zixi Software-Defined Video Platform (SDVP) enables broadcasters, service providers, and content owners to transport live linear video securely and at scale utilizing IP networks.

Video providers are increasingly looking to deliver content over-the-top and to multiple devices. As video consumption shifts away from legacy methods, content providers require a scalable and cost-effective way to process and distribute video to consumers for viewing on a wide range of connected devices.

The Zixi SDVP provides point-to-point or point-to-multi-point live video transport over IP at ultra-low latency. A key component of the Zixi SDVP is its transport protocol, which dynamically adjusts to varying network conditions for error-free video streaming over IP.

The Zixi SDVP coupled with ZEN Master live video orchestration and telemetry control plane offers advanced analytics and stream management capabilities and enables broadcast-quality live video contribution and delivery over IP networks and across industry protocols. Together, Zixi protocol and ZEN Master are used to source, manage, and distribute live events and 24/7 live linear channels at scale.

Zixi has over 500 customers and more than 150 OEM and service partners globally, making its platform interoperable with a variety of tools in the media ecosystem. This Interoperability is key to building seamless and efficient video solutions that enable customers to scale reliably and economically.

The Zixi SDVP is interoperable with AWS Media Services, cloud-based services with pay-as-you-go pricing that provide customers the capability to ingest, process, package, and deliver video content at scale. This includes AWS Elemental MediaLive, a broadcast-grade video processing service that lets customers create high-quality live video streams for delivery to broadcast televisions and internet-connected devices.

Zixi also offers API integration with AWS Elemental MediaConnect, a transport service for live video that allows broadcasters and content owners to send high-value content into the cloud or transmit it to partners for distribution. Zixi is used for content ingest, intra-cloud transfer, and cloud egress with MediaConnect. ZEN Master allows customers to dynamically configure, manage, and report on those video streams.

Zixi can be used for secure and economical large-scale digital and OTT content aggregation and delivery over terrestrial, satellite, multi-cloud, or hybrid IP infrastructures. It can also be leveraged for satellite replacement for large-scale cable MSO delivery, intra-cloud transport, or high-volume contribution with multiple site distributions.

ZEN Master supports supply chain processing use cases, allowing for multi-party visibility across streams, large-scale content processing, and root cause analysis. It provides the cloud-based management and orchestration of large numbers of

broadcast streams through multiple tools in the broadcast supply chain from a single user interface, serving as a centralized tool for large-scale deployment. It has become a standard for ingest, intra-cloud transfer, and egress over IP with ultra-low latency.

Analytics are quickly becoming an important tool for content providers to ensure that video is produced, delivered, and received as it should be, as well as used to improve viewer engagement. ZEN Master provides in-stream analytics to give content providers control of their live streams, including analytics for network-level transmission, TR101, content quality, and AI-driven quality scoring.

Zixi offers strong security protection using password, AES encryption, and Datagram Transport Layer Security (DTLS) security measures. ZEN Master and the Zixi SDVP provide content-aware error correction, bandwidth shaping, and real-time feedback of streaming status. With Zixi solutions and AWS Elemental Media Services, content providers can confidently and securely deliver live, broadcast-quality linear video around the world at minimal latency.

John Wastcoat, SVP Marketing/Alliances: "Our customers and partners use Zixi and ZEN Master with AWS Elemental MediaConnect to quickly deploy, manage, and monitor complex live video services."

Challenges

1. Streaming live video with ultra-low latency
2. Managing global deployments
3. Ensuring broadcast quality streams

Solutions

1. Live linear latency below two seconds with transcode
2. Resilient cloud-based managed service available worldwide
3. Centralized live stream acquisition, orchestration, and distribution

Benefits

1. Broadcast-quality delivery of live streams over IP
2. Enables operators to launch video services faster without costly CAPEX
3. Easily onboard, manage, and report on live linear channels and events

Learn more at https://zixi.com