

# FROM SATELLITE TO IP DELIVERY

## UPGRADE YOUR INFRASTRUCTURE AND BROADCAST OVER IP

As C-band spectrum is re-allocated to accommodate for 5G development, broadcasters are exploring alternative transport solutions for content delivery as the amount of bandwidth available diminishes. In addition to the distribution challenges, broadcasters that rely on satellite are also facing operational challenges. From risks with potential interference at downlinks, lack of visibility into data transmission, to a drop in revenues and consumer spending due to a customer base that's migrating to OTT streaming solutions, programmers and service providers are looking for ways to cut costs and turn toward more efficient ways to acquire and deliver content.

As IP delivery has emerged as an efficient, and reliable alternative to satellite distribution of live content, more content providers are leveraging IP-based or hybrid IP distribution models for delivery of live video. The Zixi Software-Defined Video Platform (SDVP) provides a flexible and efficient solution to replace or augment satellite distribution, making it easy for media companies to deliver broadcast quality video over IP networks securely, reliably and cost-effectively at scale.

### DELIVER OVER ANY IP NETWORK WITH THE SDVP

The SDVP enables broadcast-quality video delivery over any IP network, any protocol, any cloud provider, and any edge device, providing a comprehensive and scalable solution for the transport, monitoring and management of live video. The SDVP is the unique integration of four main components: Protocols, Video Solutions Stack, ZEN Master and the Zixi Enabled Network. Each part of the SDVP provide capabilities and solutions that make live video distribution with Zixi unparalleled. Because of its interoperability, the SDVP serves as a **universal video gateway**, a way to deploy live video workflows between and across a large ecosystem of media organizations and IP networks using one comprehensive software-based platform.

### ADVANTAGES OF SATELLITE RATIONALIZATION WITH ZIXI

**Reduced Costs** – Satellite transponder time is expensive and typically requires long term commitments. With Zixi, save as much as 50% in terms of TCO.

**Flexibility** – No need for long-term contracts: spin up and down Zixi instances as needed.

**Improved Uptime** – Achieve 99.999% reliability or higher when delivering live video over IP with Zixi.

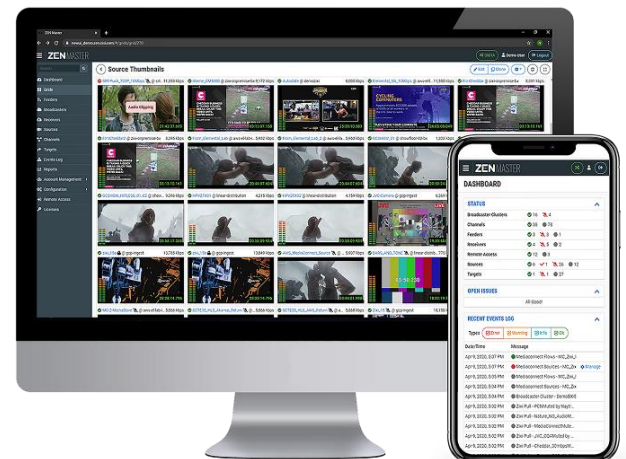
**Increased Visibility to Stream Data** – Zixi's ZEN Master control plane provides end-to-end visibility and enables media organizations to easily manage, orchestrate, monitor and troubleshoot highly complex delivery workflows.

**Easily Increase Reach** – Add new geographies with the click of a button to expand to incremental markets at a low cost.

**Future-Proof Solutions** – As a software-defined solution the SDVP technology is upgraded with each new software release, allowing customers to easily iterate their workflows and employ new features quickly as new delivery requirements and opportunities evolve.

**Customizable Technology** – With support for SCTE markers and traditional features like closed captioning, Zixi enables media organizations to customize and localize programming feeds and ad insertion to take advantage of evolving markets and revenue opportunities.

**Turnkey Solution** – Proven solution for software-based deployments over IP and hybrid IP networks.



ZEN Master

## STRATEGIES FOR SATELLITE RATIONALIZATION

The SDVP provides a way to standardize source acquisition and normalize for distribution, all while providing an interoperable, iterative solution that will help simplify any broadcast workflow. With Zixi's ZEN Master control plane, users can maintain visibility across their content distribution workflow, leveraging tools such as source/endpoint creation, data visualization of stream analytics, thumbnail monitoring, alerting and reporting to ensure that video is delivered at broadcast quality.

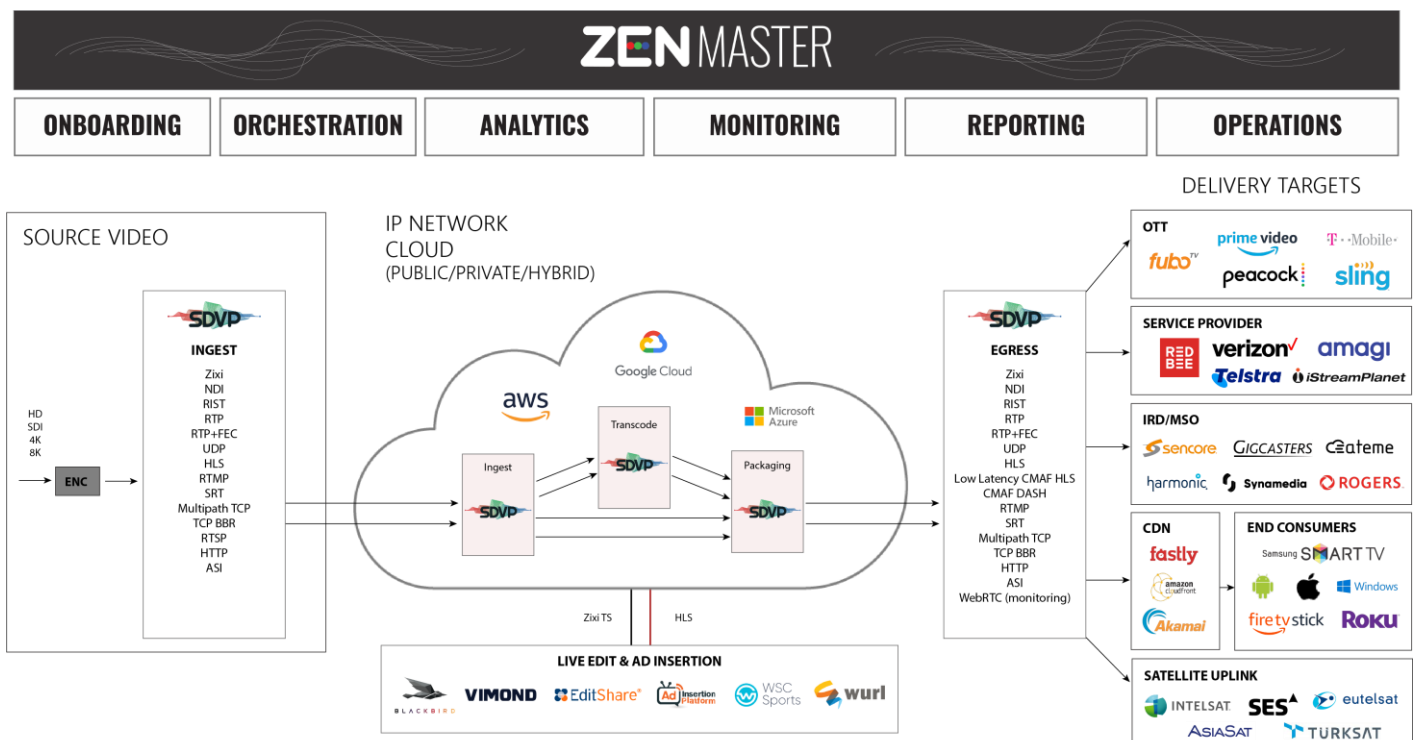
### Zixi for Contribution

Zixi provides an efficient and cost-effective alternative to satellite contribution. Transitioning off of satellite for live video delivery can be a daunting task, with many elements to coordinate across operational, engineering and administrative teams. Contribution with Zixi over IP or hybrid IP networks is simple and offers a seamless migration from traditional pathways for delivery. As a software-solution, broadcasters can instantly spin up a Zixi contribution workflow without extensive coordination between multiple parties. To send live video with Zixi, simply provide a host name and an IP address to send the content.

### Zixi for Distribution

Zixi makes it easy to deliver content to a variety of endpoints across a range of geographies. The SDVP gives content providers the flexibility to send live video to multiple endpoints through one comprehensive platform, with the added benefit of capturing data from every endpoint where the content is delivered to confirm that it ran as intended. Expand or remove endpoints at any time with the click of a button, and to add an instance for a live event you can spin up and down Zixi instances for content delivery as needed. Zixi allows users to easily activate additional delivery targets anywhere in the world without the need to navigate different geographical satellite providers and fiber lines, making it easy to add new markets to your distribution at a lower cost.

## A SINGLE PLATFORM TO STANDARDIZE AND FUTUREPROOF WORKFLOWS



## SATELLITE USE CASE EXAMPLE

Recognizing the forthcoming reduction of C-Band spectrum and the rising costs of leveraging satellite for distribution, a content provider recently switched from satellite distribution to distribution over IP with Zixi to broadcast live linear channels to cable television providers across the United States.

Because of the Zixi Enabled Network of integrated technology providers, the content provider was able to leverage their existing IRD they had deployed at over 150 sites in the field for their distribution workflows. With Zixi already able to work within their existing infrastructure, deploying the new solution was very simple. A firmware upgrade was sent out to all the devices, and with a simple software update and no additional CAPEX expense for a hardware refresh, the IRDs were equipped to receive the signal from the content distributor. With Zixi enabled, it was possible to customize channels for specific locations without incurring additional costs and leverage a more tailored distribution strategy.

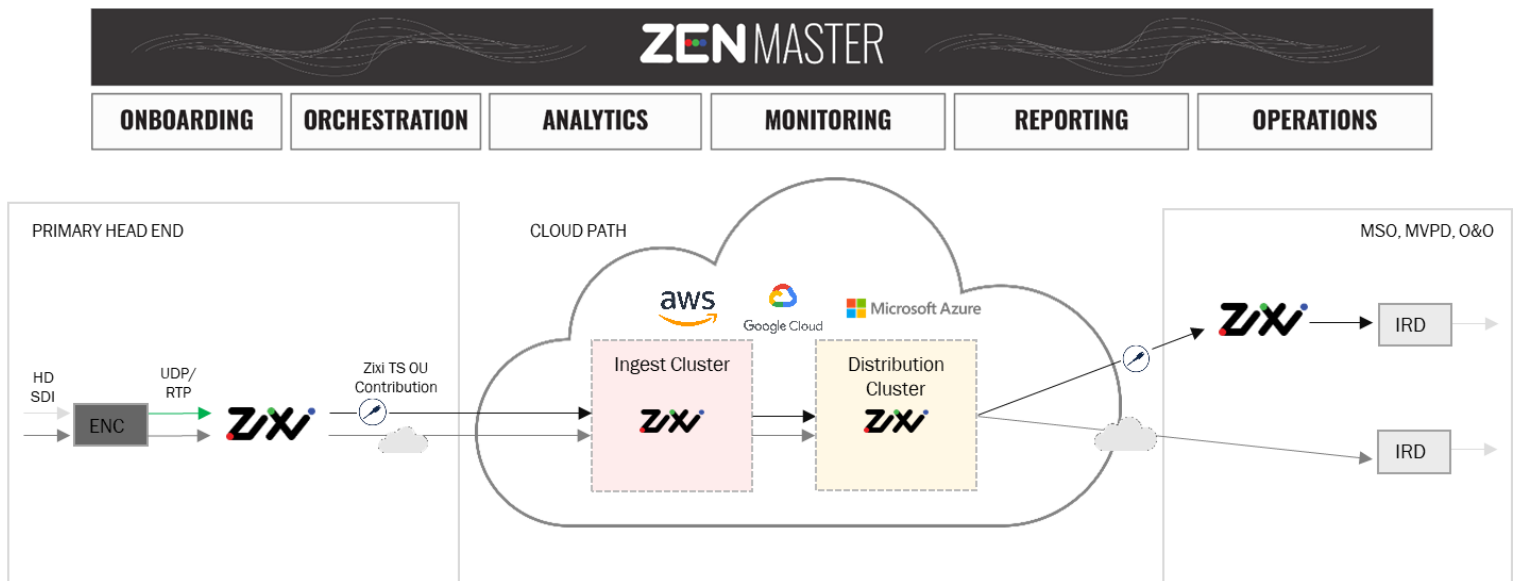
For the distribution workflow, the content provider set up redundant video sources across two different locations. The live video streams were sent using Zixi transport over the open internet to two Zixi separate software clusters in US East and West locations, both hosted in the Zixi Cloud. Target devices actively pulled Zixi transport streams from the US East cluster, while a secondary warm input was configured to pull from the US West instance where the device-initiated failover if or when it was needed. Zixi's ZEN Master control plane provided the ability to manage and monitor stream deployments across this complex delivery network to ensure broadcast-quality content delivery.

The turnkey solution enabled the content provider to move off satellite, rapidly and in a cost-effective manner that required little operational lift and no hardware infrastructure investment, allowing them to quickly deploy customized channels over existing IP networks while maintaining visibility and data telemetry throughout their distribution ecosystem.

### ZIXI BENEFITS

- Turnkey solution for software-based deployment
- Cost-efficient use of the Internet for delivery and Zixi Cloud
- Leverage Zixi network of 250+ interoperable existing partners
- Ability to customize channel delivery at no incremental cost
- Create new sources and delivery targets as needed
- Flexible delivery infrastructure able to adapt to future requirements

### EXAMPLE SATELLITE RATIONALIZATION WORKFLOW



### ABOUT ZIXI

Zixi provides a cloud based and on-premise Software-Defined Video Platform enabling the management, orchestration, monitoring, and delivery of broadcast-quality live and live linear video over any IP network, protocol, cloud provider or edge device. Over 10+ years, the Zixi Enabled Network (ZEN) of partners has grown to over 250 OEM and service providers with whom Zixi serves well over 700 customers representing most of the top media brands around the world with 20,000+ channels delivered daily. <https://zixi.com/>

Contact: [sales@zixi.com](mailto:sales@zixi.com)