



**THE GLOBAL LEADER IN  
BROADCAST QUALITY  
LIVE VIDEO OVER IP**

**Scaling Remote Production**

December 8<sup>th</sup> , 2020

# Commitment to the Cloud

The media industry is currently undergoing a rapid move to cloud virtualization



## Regarding the move to remote workflows and virtualization:

**97%** Of Media Executives believe it will provide new revenue opportunities

**93%** believe it will provide cost saving opportunities

**95%** believe it will drive faster cloud adoption

**93%** believe it requires more telemetry data and orchestration



# Benefits of Cloud-Based Broadcast Infrastructure

## **MORE EFFICIENCY**

Cloud Virtualization allows for a more cost-effective, sustainable broadcast infrastructure

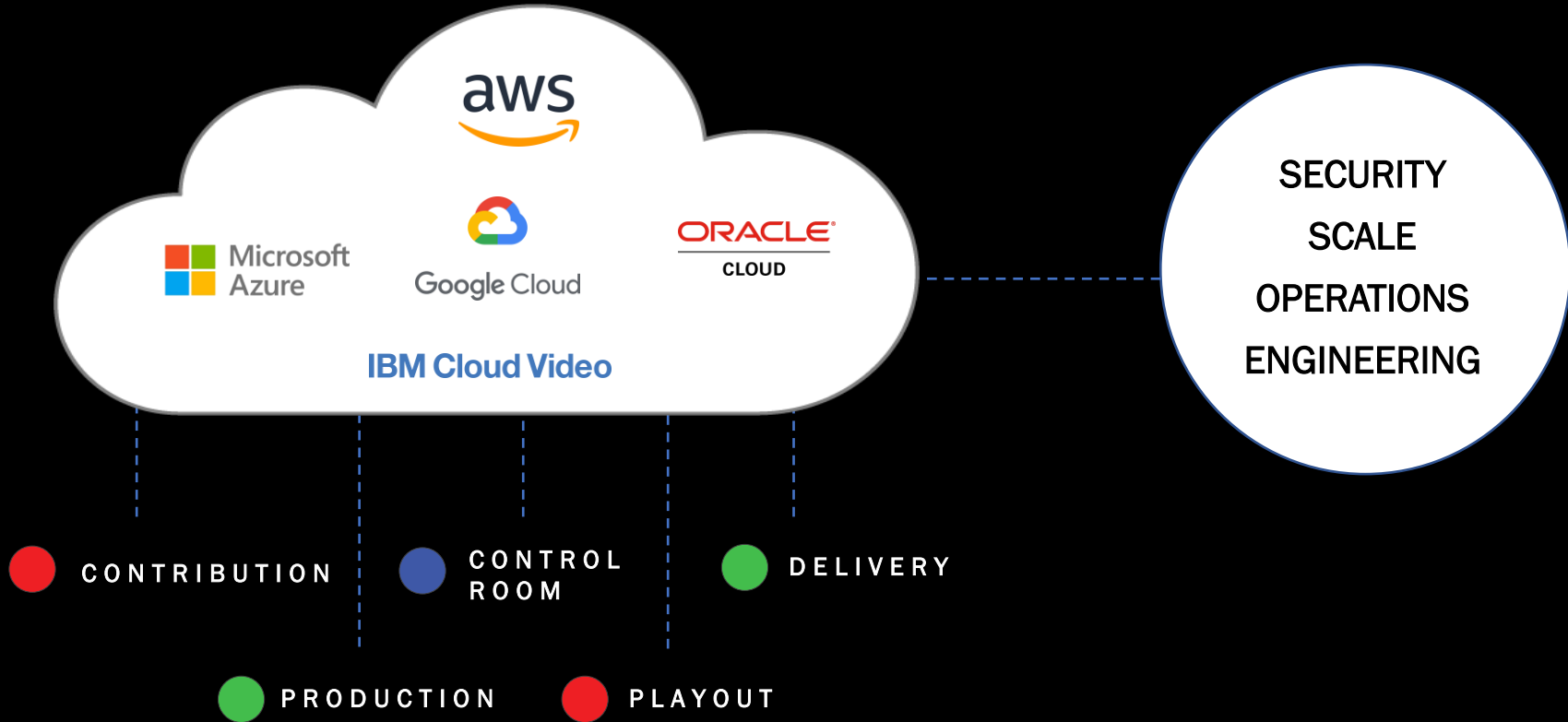
## **MORE FLEXIBILITY**

The flexibility and iterative nature of software-defined live streaming solutions have become mission critical

## **MORE INTEROPERABILITY**

Need for interoperability between different levels of protocols, platforms, edge devices, media processing, encoders/decoders, CDNs

# Cloud-Based Live Television Workflow



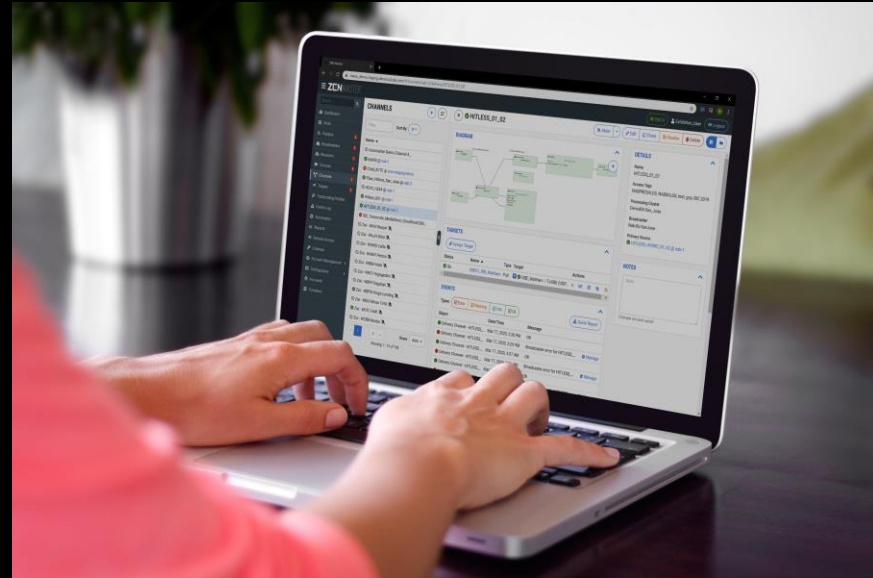


# Control Room in the Cloud



ZEN Master enables secure remote workflow management with visual tools to configure, orchestrate, manage and monitor live broadcast channels at scale across industry protocols and an entire supply chain of integrated services and devices.

- Visibility across any protocol, IP network, cloud, service provider and edge device
- Remote workflow management with telemetry across metrics at an atomic level
- Perform Root Cause Analysis across the media supply chain
- Abstract complexity to reduce engineering requirements and leverage operational resources
- Democratized access with geographic agility



## Benefits of a Control Plane:

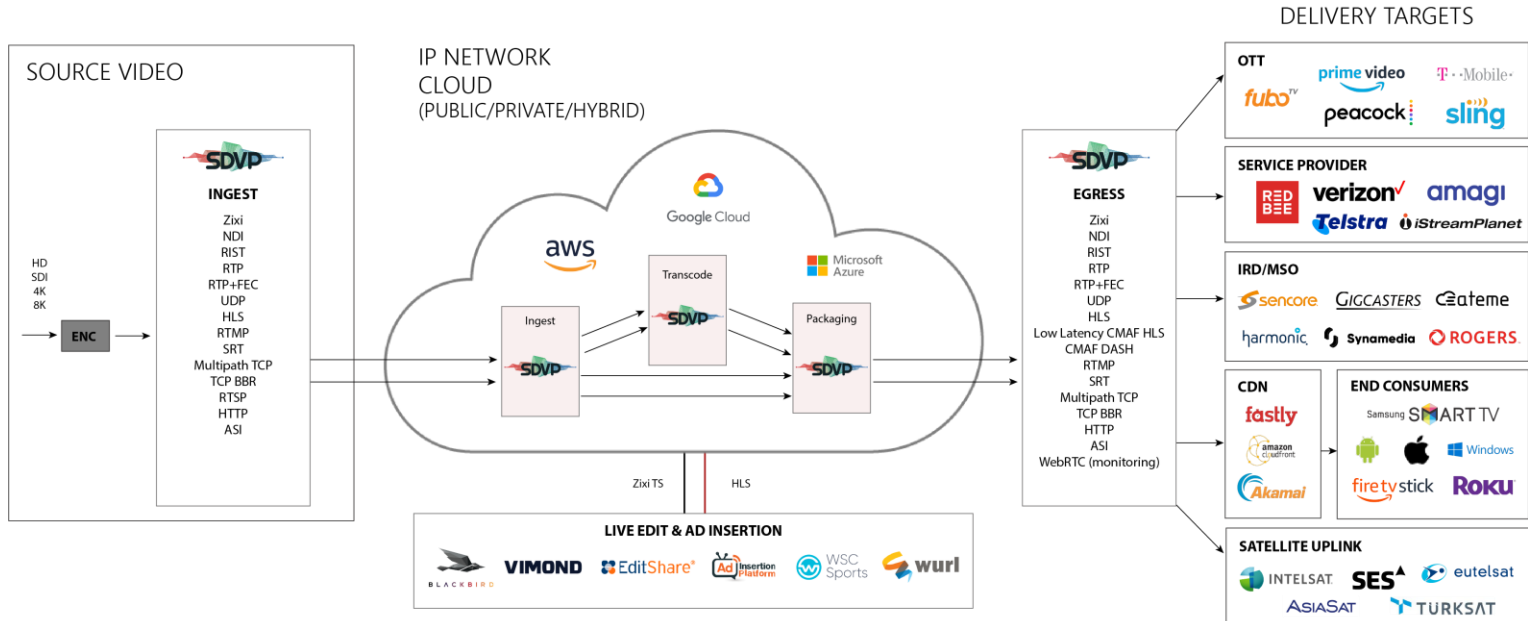
- ✓ Virtualized operations
- ✓ Deep data analytics
- ✓ Democratized usability
- ✓ Management at scale

# A Trusted Universal Video Gateway for Live Video Workflows



## ZEN MASTER

- ONBOARDING
- ORCHESTRATION
- ANALYTICS
- MONITORING
- REPORTING
- OPERATIONS



# Secure Delivery with Zixi

- Best-in-class security protocols and the most sophisticated protection are among the biggest reasons why customers and partners choose to send their content using the SDVP
- All streaming data that moves through the Zixi Enabled Network of integrated software and devices is protected using a multi-layered security approach:
  - Zixi Protocol employs end-to-end data encryption using industry-standard AES ciphers with up to 256-bit keys
  - Session establishment is password-protected using a secure handshake
  - DTLS version 1.2 (RFC 6347) session control with certificate validation and strong ciphers
  - Password protection across content
  - Permission based access
  - Meet Me Room in the cloud
  - Partner delivery





# Live Production Acquisition Use Case



Remote Operations Team | Engineering Teams | Executives | Talent | Directors | Producers



ZENMASTER

ONBOARDING

ORCHESTRATION

ANALYTICS

MONITORING

REPORTING

OPERATIONS

TALENT HOME  
OR  
REMOTE LOCATION



STUDIO



BROADCASTER FACILITY



Cloud Ingest



RIGHTS HOLDERS



redundancy

# Key Takeaways



- **Remote production is here to stay**
  - Need to enable remote contribution and distribution of signals across global sources and delivery targets
- **Virtual and cloud infrastructure is essential**
  - Provides ability to quickly launch new workflows that are flexible and dynamic
- **Software-defined solutions are required**
  - Software-defined video platforms become the universal commonality between media organizations and infrastructures
  - Control planes democratize the human resource spectrum
- **Content is safe and secure across supply chain**
  - The SDVP provides a trusted universal video gateway to scale the reach of broadcast operations while maintaining control over both virtual and traditional resources



Thank you!