

### HIGHLIGHTS

## THE CHALLENGE

Curating, monetizing, and onboarding distribution partners and feeds takes too long, impacting business initiatives and time-to-market. Limited visibility across the supply chain causes significant delays in identifying and resolving impactful performance issues.

## THE SOLUTION

Design new architecture for playoutto-distribution workflow that leverages ZaaS. Build geographically diverse signal paths, new channel processing and transcoding pipeline and adopt Zixi operational dashboards and advanced analytics.



## Cinedigm Operationalizes Flexible Media Supply Chain with ZaaS

For more than twenty years Cinedigm has led the digital transformation of the entertainment industry. Cinedigm entertains hundreds of millions of consumers around the globe by providing premium content, streaming channels and technology services to the world's largest media, technology and retail companies. The company's core mission is to entertain the world by building the best portfolio of channels and services for the streaming generation. Through a diverse mix of premium SVOD services and dedicated AVOD and FAST channels, Cinedigm's streaming portfolio reaches indie film (Fandor), horror (Screambox & Bloody Disgusting) and family entertainment (Dove Channel), as well as dedicated channels for iconic entertainers, led by Bob Ross (The Bob Ross Channel).

## "VIEWER ENGAGEMENT OF FAST CHANNELS IS A KEY PART OF THE BUSINESS, AND WE MUST OWN THAT EXPERIENCE"

Tony Huidor
Chief Technology & Product Officer

Cinedigm's live linear programmed FAST channels need to provide a smooth and consistent viewing experience to customers regardless of the platform and device. This means delivering over 20 linear channels to more than 24 target destinations. Key considerations include rapidly onboarding new FAST channels and scaling distribution with robust end-to-end visibility and complete operational control. With Zixi, Cinedigm was able to consolidate numerous disparate systems into a single ZEN Master instance, providing deeper operational visibility and control, enhancing resiliency throughout the workflow and actively mitigating egress costs.

There are four primary areas of the distribution:

- Programming and Metadata Enrichment
- Channel Scheduling and Playout
- · Linear Transport, Operations and Analytics
- CDN

## **BUILDING FAST CHANNELS**

Cinedigm use their own solution, Matchpoint, for managing the library of VOD assets and enriching the descriptive, rights and schedule metadata associated with them. Matchpoint indexes Gracenote programming metadata to help organize VOD assets, aid in audience discovery and support programmatic playout scheduling.

"CINEDIGM HAS SCALED TO A POINT WHERE WE NEED TO BE ABLE TO DIRECTLY MANAGE OUR FAST CHANNEL DISTRIBUTIONS, AND THE ZIXI PARTNERSHIP MAKES THAT OPERATIONALLY POSSIBLE AND ECONOMICALLY FEASIBLE."



#### **HIGHLIGHTS**

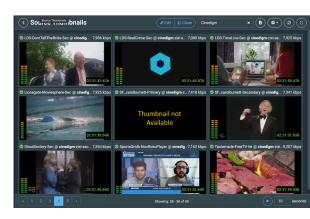
#### **RESULTS**

A flexible and operationally efficient media supply chain that enables rapid development of new live linear FAST channel offerings and accelerates onboarding more distribution partners without scaling costs or complexity.

- Zixi ZEN Master gives Cinedigm operations teams complete visibility and control over the curation, playout, processing and distribution of all linear channels to all distribution partners.
  Improving quality, reliability and operational flexibility.
- Zixi IDP's powerful predictive analytics and actionable insights help Cinedigm understand when disruptions may be coming to proactively route around them before audience impacts are felt.
- IDP delivers automated incident detection and Al/ML driven RCA reporting, leading to significant reductions in response times and incident severity while also enabling Cinedigm to iterate on design and process improvements to mitigate future impairments.
- New ZaaS enabled delivery workflows have accelerated new distribution partner onboarding and led to significant egress cost savings across the portfolio.



With well structured hierarchical entertainment feed data, Cinedigm build a programmatic playout schedule in coordination with their playout managed service provider. An electronic program guide is generated for each of over 20 channels, including defining ad avails within the program schedule. The playout provider originates a mezzanine Zixi enabled transport stream for each channel, pushing these across geographically diverse signal paths to Zixi-as-a-Service (ZaaS). Because the playout provider leverages Zixi, Cinedigm receive real-time telemetry data,



advanced network congestion and error correction management and significant bandwidth efficiency improvements over legacy systems.

## "ZIXI DELIVERS ACTIONABLE INSIGHTS ON THE HEALTH AND PERFORMANCE OF FAST CHANNELS, ENABLING THE OPERATIONAL AGILITY WE NEED TO RAPIDLY SCALE."

## RELIABLE TRANSMISSION OF FAST CHANNELS

ZaaS ingests primary and secondary linear channel mezzanine feeds with real-time monitoring that includes detailed analytics on channel availability, network performance and even content quality. The service is continuously evaluating the playout server feeds and validating technical and quality compliance.

ZaaS transcode engines create a quality optimized ABR streaming ladder packaged for distribution to the Cinedigm content origin on Microsoft's Azure cloud service. ZEN Master delivers total operational visibility across all phases of the content distribution, from playout server to CDN, with detailed telemetric reporting and realtime alerting. The Intelligent Data Platform (IDP) continuously analyzes billions of telemetry data points, leveraging well-trained AI/ML models to accurately predict future performance issues based on deteriorating network or channel health and generates an action plan describing the leading indicators that are causing declining channel health. When an incident is detected, IDP automates the response, programmatically detecting and generating a complete report of all KPIs leading up to and immediately after the detected incident. This has enabled Cinedigm to drastically reduce the number

"WE HAD AN OPERATIONAL VISIBILITY VOID THAT WE'VE SOLVED BY BRINGING CHANNEL ORIGINATION AND DISTRIBUTION IN-HOUSE."





of operational incidents, and when an incident does occur, the time to understanding root cause and implementing mitigating processes has been reduced from over 3 days to less than a few hours. Operational dashboards in ZEN Master and IDP actionable insights have helped Cinedigm accelerate linear FAST channel distribution, removing technical hurdles that complicated onboarding content or distribution partners while significantly reducing operational costs and headaches.

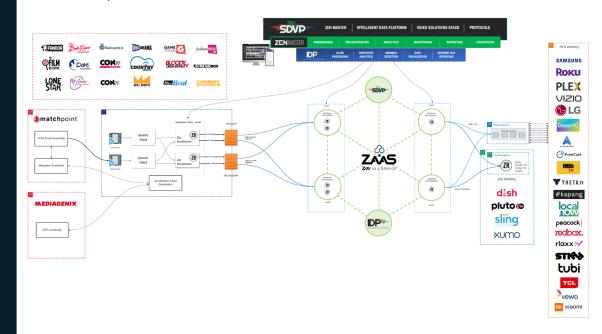
## **CLIENT DISTRIBUTION**

ZaaS delivers the live linear transcoded ABR streams directly to CDN origin servers deployed in Microsoft Azure. Zixi manages delivery to the origin servers across geographically diverse signal paths, ensuring that continuous delivery to the origin is guaranteed, while Cinedigm leverages Akamai as the CDN partner to deliver tailored HLS feeds to a network of 24 takers, powering FAST channel lineups on leading OTT services and device platforms. Utlizing Azure origin has led to significantly lower egress fees associated with back-end B2B content distribution as a result of favorable egress terms negotiated between Akamai and the Azure team, enabling Cinedigm to deploy more channels without seeing continuously scaling egress fees.

# "OTT IS A SIGNIFICANT PORTION OF THE BUSINESS AND A MAJOR DRIVER IS FAST CHANNEL LAUNCHES."

With this powerful suite of solutions in place, Cinedigm can more rapidly launch new FAST channels and distribute to an ever growing number of target destinations without losing operational control, visibility or efficiency. With Zixi, Cinedigm now have the most complete platform for managing all aspects of live video distribution and are seeing significant reductions in time-to-market, while increasing audience engagement and channel uptime.

## **CINEDIGM | ZIXI SYNDICATION**



## **ABOUT**

## **CINEDIGM**

For over 20 years, Cinedigm (NASDAQ: CIDM) has led the digital transformation of the entertainment industry. Today, Cinedigm entertains consumers around the globe by providing premium feature film and television series, enthusiast streaming channels and technology services to the world's largest media, retail, and technology companies. Cinedigm continues its legacy as an innovator through its adoption of next-generation technologies, such as artificial intelligence and machine learning, across its proprietary, highly scalable Matchpoint® technology platform.

www.cinedigm.com

## 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 devices to broadcasters, enterprises, over-the-top video providers, and mobile service providers around the world. Over 15+ years, the Zixi Enabled Network (ZEN) of partners has grown to over 350 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.

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