

Quick facts

## True cloud

Fully cloud-based set-up for playout management

# vMVPD delivery

to Twitch, YouTube, and many more vMVPDs

### Live switcing

for shows using web UI

## About Cinedigm & ConTV

Cinedigm is a leading independent content distributor in the United States, with an extensive library of over 52,000 movies, and episodic content. The company holds rights for award-winning documentaries, next-gen indie films, and festival picks in partnership with leading brands such as National Geographic, Discovery, Scholastic, NFL, and Hallmark Channel among others. Cinedigm's first channel, DOCURAMA was launched in 2014 and is now available to over 165 million consumers across devices such as Roku, and Xbox.

ConTV is a linear channel launched by Cinedigm focused on the needs of the comic con community. The channel has exclusive content from the events, as well as thousands of hours of programming featuring sci-fi, anime, martial arts, cult films, documentaries and more.





### **Business requirements**

Cinedigm wanted to deliver ConTV to multiple virtual Multi Video Programming Distributors (vMVPDs), starting with Twitch, followed by YouTube, and many others. One of the key requirements from Cinedigm was to allow Twitch to insert ads in the live stream.

Additionally, Cinedigm needed an effective system that could normalize around 16 different profiles of incoming assets, and a user-friendly interface to streamline their scheduling requirements.



About Twitch (www.twitch.tv)

Twitch is the world's leading social video service and community for gamers. Each day, millions of community members gather to watch, talk, and chat about shared interests. Twitch's video service is the backbone of both live and on-demand distribution for all types of content, including the entire video game ecosystem, the creative arts, vlogging (IRL), and more.



### Linear delivery to vMVPD

To start a linear OTT channel from existing online content



### Live events support

For live shows coverage



## Dynamic graphics playout

Playout graphics using templates

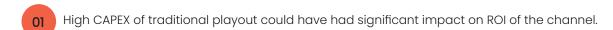


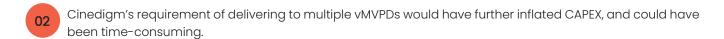
### Third party ad insertion

Allowing the vMVPD platform to trigger ads using API

### Disadvantages of using traditional playout

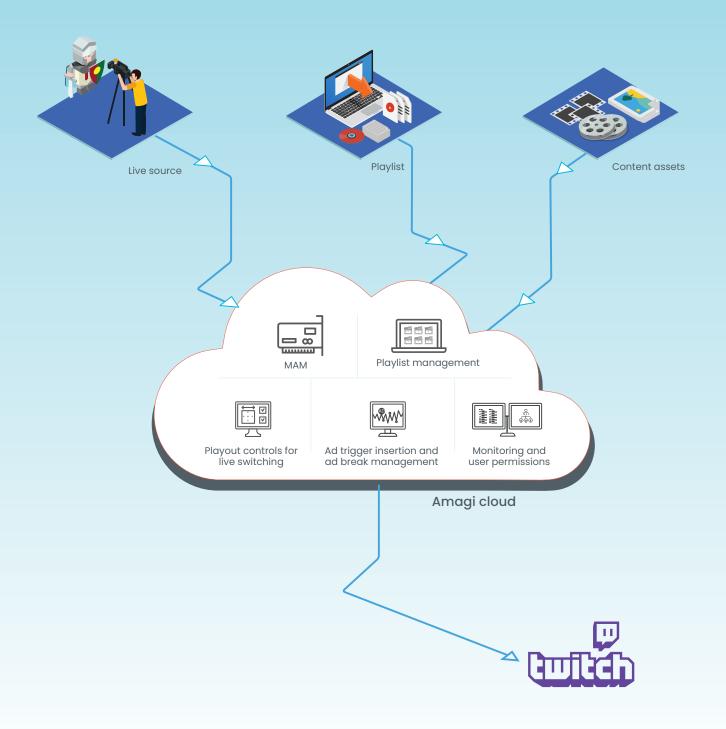
A traditional playout would not have been an ideal choice for delivery to vMVPD platforms for multiple reasons.





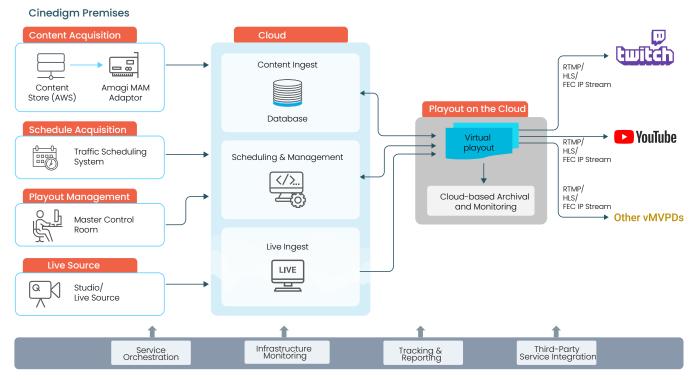
The integration with vMVPDs for monetization would be highly complicated and may not have been feasible using the traditional playout.

Amagi deployed its CLOUDPORT playout solution with web-based unified user interface for content management, playout, scheduling, monitoring, and live event orchestration. CLOUDPORT enabled Cinedigm to process dynamic graphics, support live event switching, and to insert ads using ad triggers. With CLOUDPORT, Cinedigm could store content assets securely on cloud, and generate a unified stream for delivery of Con TV to Twitch.





## System architecture



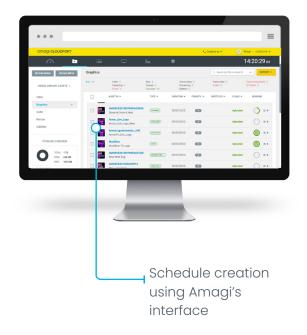
"Cloud" refers to AWS or Azure-based pure cloud playouts.

### CLOUDPORT workflow: Automated content ingest

Cinedigm had a requirement to streamline output for 16 different asset profiles. Amagi set up the entire workflow on cloud to normalize assets to HD resolutions at 29.97 frame rate. Assets were pushed directly from Cinedigm's S3 bucket to Amagi AWS cloud storage. Live input was received in form of Zixi stream, and integrated into the playout. Closed captions were ingested in .scc format and played out as DVB pass-through cc608.

# CLOUDPORT workflow: Scheduling

Cinedigm used Amagi's web-based playlist scheduling interface to create and manage playlist up to three weeks in advance. With a drag and drop feature of adding assets to playlist, Cinedigm could manage the playlist within a very short timeframe.





## **CLOUDPORT workflow: Dynamic graphics**

CLOUDPORT's dynamic graphics feature was instrumental in simplifying graphics management for Cinedigm. Using CLOUDPORT, Cinedigm could templatize graphics as per their unique requirements. This eliminated the need to manually insert similar graphics with different texts.

Cinedigm's team could create a template for specific types of graphics and use it repeatedly whenever required.

CLOUDPORT also enabled Cinedigm to enrich Con TV experience on Twitch with Digital Video Effects, such as Credit Squeeze, Animated logos, and even the live Twitter feed integration.

## **CLOUDPORT workflow:** Custom ad trigger for monetization

- Twitch required a custom API to trigger ad insertion during ad breaks on ConTV.
- 2. Amagi's professional services team developed the automation to trigger API at the start of ad breaks in linear channel playout.
- 3. Amagi developed an analytics dashboard for Cinedigm that included details about the number of users, geographies, and viewership of specific programs.
- 4. This customization helped Cinedigm to monetize their channel content, and gain viewership insights.



\*Image for representation purpose only.



# CLOUDPORT workflow: Live event switching

CLOUDPORT's web-based interface also enabled Cinedigm to switch from linear to live and vice versa, with click of a button. Cinedigm could monitor low resolution feed of live event and currently playing asset, and then switch to live within 10 seconds by clicking the

'Live On' button, in the playout control of unified management interface. The web interface also helped in enhancing the output with capabilities such as being able to change the logo for the duration of live event.

### Benefits for Cinedigm



Zero CAPEX.
Only OPEX model

Zero CAPEX and low OPEX, cloud playout model



Live event orchestration

No separate solution needed for live events



Advanced dynamic graphics support

Graphics automation using templates



Simplified playlist management

Web-based scheduling with drag and drop functionality to create and edit playlist



Customized ad insertion triggers

Custom workflow to trigger ads as per unique requirements of vMVPDs



Automated monitoring alerts

Advanced web-based monitoring with automated alerts for any possible errors

### **CLOUDPORT** features



## DVE including Live score update, L-Bands, PIP, video squeeze, and credit squeeze



Adobe After Effects template import capability



Dynamic graphics generated from asset meta data and playlists



Static/animated logos and bugs



Multi-layer full screen graphics



Count-down timers



#### Multichannel playout

- Regional feeds set up-create sub feeds with local opt-out
- Playlists integration for ad/content insertion
- End-to-end workflow management through web UI
- Live monitoring (MCR) experience on web

#### Security and reliability

- AES 128-bit encryption
- Role/permissions and access levels
- Audit trails of user activities
- Playout server 1+1 hot swap redundant
- Redundant cloud storage

### Live/near live/non-live

- Live news and sports feeds
- Last minute asset uploads
- Real-time playlist changes
- 4K UHD, HD, and SD output

