

M2A  Media



# DAZN benefits from live streaming in the cloud using M2A Media

DAZN is the world's first truly dedicated live sports streaming service, providing fans with unlimited access to watch the widest array of live and on-demand sport on virtually any internet-connected devices; including desktop, tablet, smartphone, smart TV or games console. Events can be watched live or on demand, or in highlights packages. DAZN uses M2A LIVE to deliver low latency, low buffering, high quality video to ensure the excellent streaming service that its subscribers have come to expect.

DAZN launched in Germany, Austria, Switzerland and Japan in 2016, Canada in 2017, Italy and U.S. in 2018 and Spain and Brazil in 2019. In 2020, DAZN expanded to more than 200 countries and territories, reinforcing the commitment to becoming a global sports destination platform.

## The Challenge

In order to offer the most comprehensive live sports package DAZN receives live event streams from

venues across the globe. The streams are produced in multiple languages and then delivered to subscribers using a wide variety of devices and network capabilities. The result must be delivered at broadcast quality and offered with low latency and no interruption in playback.

The event schedule can vary from a handful of concurrent events midweek to 40 concurrent events at peak times in the weekend. Audience levels vary from niche to huge demand as seen during events like the Mayweather/McGregor fight.

The challenge, therefore, is to offer a service that can handle the fluctuations in scheduling, demand and regional activity without any degradation of service.

## The Solution

Working closely with M2A Media to add M2A LIVE to its Live Event delivery pipeline DAZN was able to find a solution to meet this challenge.

The M2A live streaming architecture runs active/active in two Amazon Web Services (AWS) regions to ensure full redundancy of the live workflow. Source streams are cross-connected from two DAZN data centres resulting in each event encoded live in two AWS regions from redundant sources. This delivers a broadcast level of availability for every live minute.

The live streams are transcoded by cloud instances of AWS Elemental Live to a carefully chosen ABR set and then presented to Unified Origin for just-in-time packaging and encryption and to maintain the live archive. The Unified

Origins create DASH, Smooth and HLS streams with tailored manifests for each event and device type. The streams are served through NGINX caches and presented to CDN. The origins and caches are tuned to autoscale to react immediately to increases in user requests. The API's also allow for instances to be pre-warmed to handle the biggest leaps in user numbers seen with the top tier events.

In addition to live streaming, M2A's service delivers a 30-day rolling archive and M2A CAPTURE preserves every live event as a VOD asset to use for catch-up viewing.

The solution uses a multi CDN configuration that can be tuned to deliver the best performance around the world.

To guarantee broadcast quality SLAs, M2A LIVE service is supported 24/7 from our London MCR by skilled media operators.

## Scalable

Audience sizes can vary dramatically depending on the sporting event. M2A Media's live streaming solution uses auto-scaling algorithms to provision origin and cache instances as the audience builds.

Similarly, instances are shut down when audience numbers fall to save on AWS resource cost. The service consistently

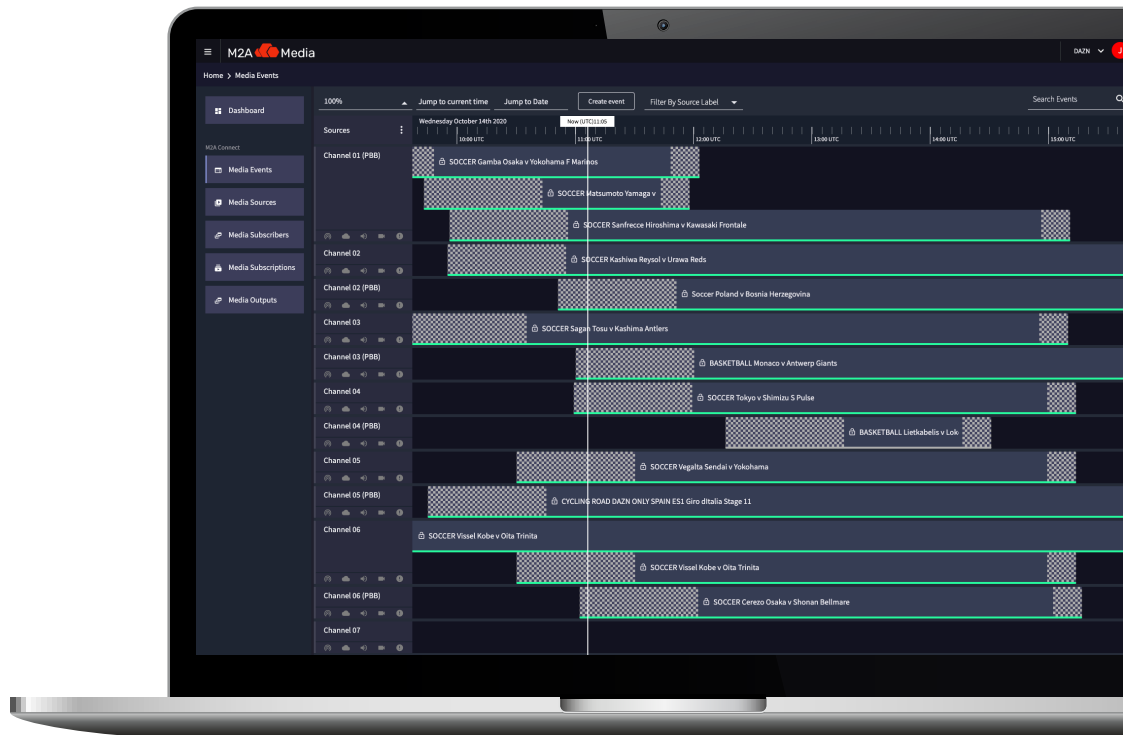
handles big peaks in audience for events like the El Clasico or the Mayweather McGregor fight without causing rebuffering or video start failures.

The M2A service has no limit on the number of events that run concurrently. Using the M2A Live Event API resources are allocated only for the duration of the live event.

## Benefits

M2A LIVE provides DAZN with the following benefits:

- Full 1080P50 HD video streaming with ABR profile sets tailored to devices to maximize playback experience
- Dozens of live events concurrently streamed with complete end-to-end resilience
- Live rewind and catch-up
- No degradation in service even for the big live events that attract flash crowd
- Simple API integration into customer's existing entitlement and event scheduling system
- Integration with all major CDNs
- Full real-time monitoring and multi-viewer integration
- Full 24/7 operational support with guaranteed SLAs up to 99.999
- Flexible Opex commercial model



"DAZN's live sports streaming service is revolutionising live and on-demand sport for viewers worldwide. To do this we constantly push the boundaries of technology and needed a service provider that would be able to meet these challenges.

M2A Media's live streaming and live capture services are helping us deliver a core experience that is integral to the quality of service we deliver to our subscribers across the globe."

Dom Wedgwood  
SVP Broadcast Technology, DAZN Group