

# Playout Customer Application Brief

## Live OTT Channel Provider

- **Location:** U.K., several sites
- **Number of Channels:** 24
- **System Design:** Mixed redundancy:  $N+0$  and  $N+N$
- **Grass Valley Equipment List:** Morpheus & ICE using UX
- **Company Overview:** A subscription-based live and on-demand OTT service launched in 2016. Offering in the region of 10,000 events per year spanning various live event types

## Challenges to Be Solved

- Recently winning the rights to host a number of high-end live and reactive channels highlighted the need for more advanced capabilities than their incumbent playout solution could provide
- The ability to trigger downstream insertion of personalized ads (using SCTE triggers), a feature that the existing playout solution did not support. Various triggering scenarios were required whereby the SCTE event has different time offsets relative to its main event
- As an events-based operation they have channels that are temporary, and therefore they were looking for a system that could be hosted within a public cloud provider so they would only incur costs when using the channels

## How The Challenges Were Solved

The advanced feature set of Morpheus, compared to the incumbent system, was able to satisfy all of their requirements for today and into the future.

The scheduling and execution of the required SCTE triggers within Morpheus is readily achievable due to the powerful secondary event structure. SCTE secondary trigger events are scheduled, relative to their main event, starting at any point in time within the main event, or even before or after. Flexibility in how the SCTE triggers are sent was required and the exact execution timings and content were as dictated by the traffic system. ICE then inserts the SCTE data at the correct time when the main event is aired, ready to be received and acted upon by the downstream OTT delivery system.

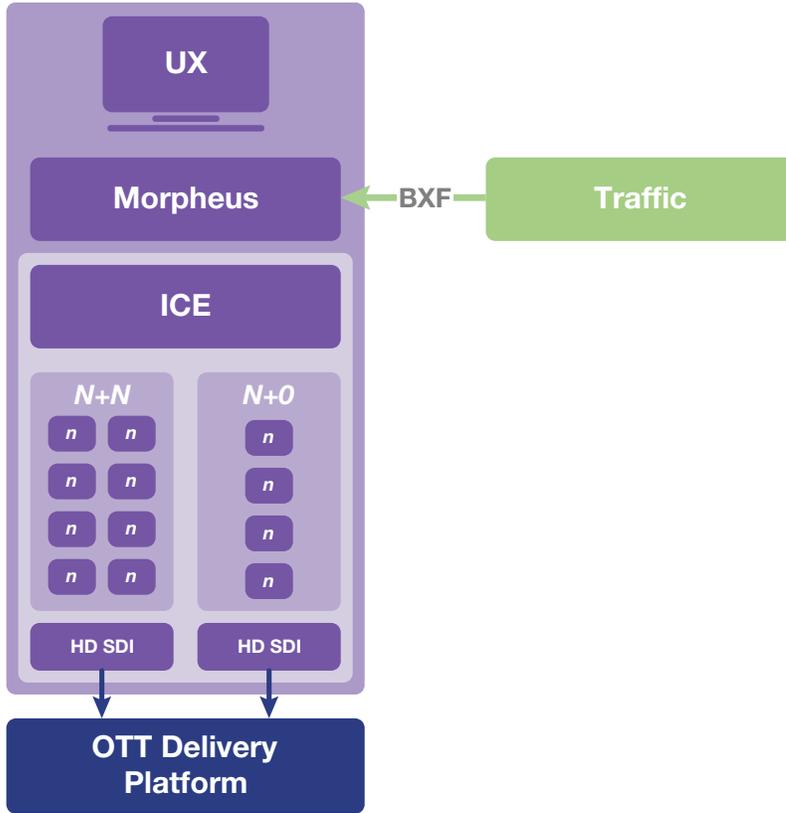
Morpheus and ICE were demonstrated to them running in AWS — this cemented the decision for them to use Morpheus as it would provide a migration path to public cloud-based playout in the future as their delivery end-point is for OTT/internet delivery. This migration path would allow them to only pay for cloud infrastructure when channels needed to be used.

## Other Key Points

Apart from the future migration of channels to AWS, their operational team was very impressed with the flexibility of Morpheus. Being web-based is essential for their operations as their equipment is situated in different locations within the U.K. and thus a web-based solution was required. Also, the UX GUI allows for hybrid control of channels hosted in AWS, or on premise. So, regardless of where the channel origination is, operationally they are all controlled centrally, delivering a unified and consistent operational experience.

As with the pay as you go AWS hosting costs, Grass Valley provided a usage-based software licensing model. This allowed for optimum cost-effectiveness when providing channels that only need to be provided for certain peak periods of time.

## Solution Architecture



- **User Interface:** Morpheus UX web GUI used with customized layouts, including manual graphics control buttons, countdown to live events
- **Redundancy:** Redundancy model is part N+N for highest revenue channels and N+0 for remaining channels
- **Traffic system:** Traffic system supplies schedules using BXF
- **Graphics:** Graphics presentation uses ICE native graphics for static and animated channel branding
- **Media Management:** File-based inventory delivered by a third-party system, processed by Grass Valley media management tools