



Playout Customer Application Brief

Free To Air Broadcaster

- Location: U.K., multiple sites
- Number of Channels: 5 networks with regionalized programming
- System Design: N+N with cross-site redundancy
- Grass Valley Equipment List: Morpheus, ICE, Morpheus Ingest & Momentum
- Company Overview: A broadcaster with national network feeds being originated from two primary data centers. Regionalization is supported within the data centers as well as via localized regional playout facilities

Challenges to Be Solved

- N+N redundancy within the data centers
- Cross-site redundancy required where any channel can be made master in either data center
- Synchronized operator triggered schedule changes and manual take operations
- Simplified traffic integration
- · Late scheduled regional programming

How The Challenges Were Solved

Morpheus Panoplay and ICE are used to allow two instances of every channel to be uniquely originated from separate Morpheus systems within each data center. Each data center has its own media management system, Momentum and SAN storage. Panoplay is used in both synchronized and unsynchronized modes so that the operators have the ability to run either differing content or delayed transitions for the redundant local network feed when required. By using the various synchronization modes offered by the Panoplay system, on a channel-by-channel basis the operator can choose if it is a master or a backup channel. This provides the ultimate flexibility in being able to protect a channels output by having control of the master and its backup.

For site-level resilience, the customer has operational staff within both data centers. There is a mix of master and backup channels distributed across the data centers under normal operation. The operator, via controls within Morpheus UX, can set any channel to be either a master or backup across either site. In an emergency situation, all channels can be managed from a single data center.

Synchronization of schedule edits and manual interventions between the data centers for each channel is accomplished using the "Intersite Sync" feature within Morpheus, in conjunction with the Panoplay channel synchronization feature that is used at each site.

Morpheus MediaBall event logic allows a simplified schedule to be provided via traffic; the MediaBall logic evaluates the supplied events and creates a large number of the required secondary events. The same logic applies to operator-added events via Morpheus UX. A change to a scheduled event triggers a re-evaluation of the required secondary events and their associated parameters.

Late schedule changes, such as breaking news, are provided via a BXF schedule update. The initial schedules supplied from traffic contain placeholder breaks and content and these are updated with the required content within seconds to on-air time.

Other Key Points

For the localized regional versions of the networks, each channel also produces a clean feed nonbranded version of the channel. This clean feed is then "regionalized" within the regional playout centers which run their own Morpheus and ICE system.

The customer has used the user-configurable capabilities of UX to create a number of operator interfaces that are highly tailored to their operational needs.

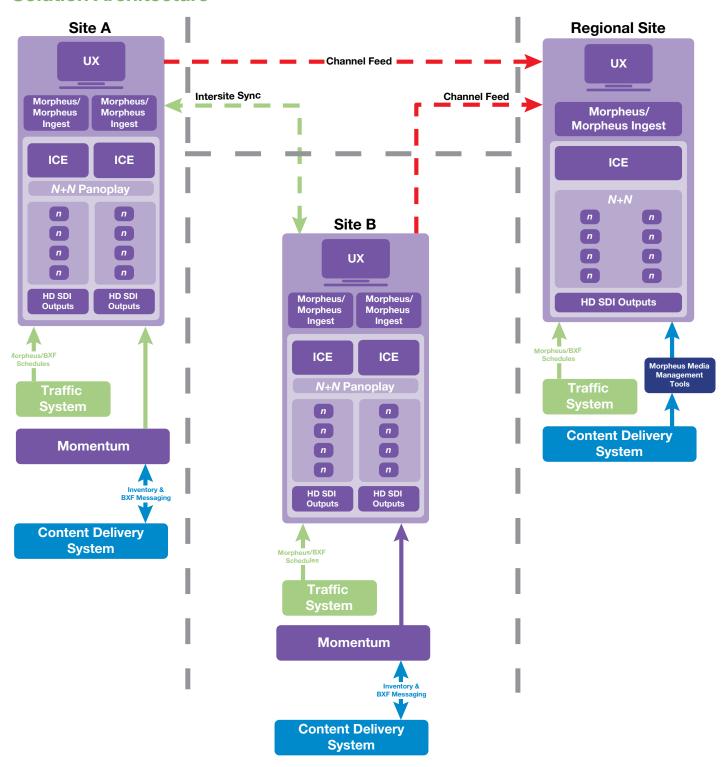
For live lines ingest, Morpheus Ingest was chosen and deployed at all sites.

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APPLICATION BRIEF

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Solution Architecture





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