

Playout Customer Application Brief

Live and OTT Channel Provider

- **Location:** U.S., multiple sites
- **Number of Channels:** In excess of 100
- **System Design:** N+N with cross-site redundancy
- **Grass Valley Equipment List:** Morpheus & ICE
- **Company Overview:** A subscription-based live and OTT service provider

Challenges to Be Solved

- N+N redundancy within primary data center
- Cross-site redundancy required with minimal additional resourcing for “hot” Disaster Recovery (DR) data center
- Synchronized manual operations triggered from primary data center
- OTT synchronized channels with commercials replacement

How The Challenges Were Solved

Morpheus Panoplay and ICE are used within the primary data center to allow two instances of every channel to be uniquely originated from separate Morpheus systems. Each system has its own Media Management and SAN storage to provide a 100% resilient architecture within the primary data center. Due to the flexibility offered by the Panoplay synchronization system, operational staff have the ability to run differing content for the redundant network feed as and when required, or run the systems totally synchronized.

The primary and DR data centers both receive live schedule updates via BXF so the customer’s traffic system is in control of the synchronization of shows and events within them across the two data centers.

Scheduled triggers are embedded within the HD video channel outputs. The on-air video feed for each primary data center channel is used to trigger the DR data center version of the channel.

Each ICE is responsible for delivering the primary DR and OTT version of the channel within the DR site. The DR channel provides triggers to the OTT channel to ensure both versions transition into commercial breaks frame accurately, the OTT version of the channel contains replacement content for the commercial breaks that is suitable for OTT.

Other Key Points

Channel branding is delivered using RT Software enhanced multilayer graphics within ICE. RT Software is responsible for channel logos, lower-thirds and DVEs. Each RT layer is independently controlled to allow independent control and timing of the various graphical elements that can be on air at the same time.

The customer has an in-house media management system that is responsible for content delivery to Morpheus and ICE. Morpheus issues BXF transfer requests for missing content and content is then registered in Morpheus via BXF. The in-house media management system delivers a single instance of the missing content to a SAN within the broadcast infrastructure and then Morpheus manages the transfer of the content, and free space, to all of the SANs with schedule demands for the content.

Solution Architecture

