

# eMAM Case Study:

## Transforming Race Media Operations for a Leading Horse Racing Club

### Overview

A premier Horse Racing Club required a scalable, enterprise-grade media asset management solution to support the complete lifecycle of race media—from live ingest and metadata enrichment to global distribution and long-term archival.

With rapidly growing content volumes, multi-site operations, and the need for precise metadata-driven search, the organization implemented eMAM Enterprise to centralize and automate its media workflows.

### The Challenge

The Horse Racing Club manages high-volume UHD race footage generated across multiple production systems, including live ingest, EVS replay systems, and field cameras. Prior to implementation, the organization faced several operational challenges:

- Fragmented ingest workflows across baseband and file-based sources
- Manual metadata management, especially race data stored in Excel files
- Large-scale content migration requirements, including 100,000–200,000 metadata files
- Distributed infrastructure, with a main site and multiple mirror sites for disaster recovery
- Limited ability to efficiently search, sub-clip, and reuse race content

Additionally, each race day generated:

- Multiple video assets
- 9–12 Excel metadata files per race day
- Critical race data (e.g., winner, jockey, trainer) requiring structured ingestion

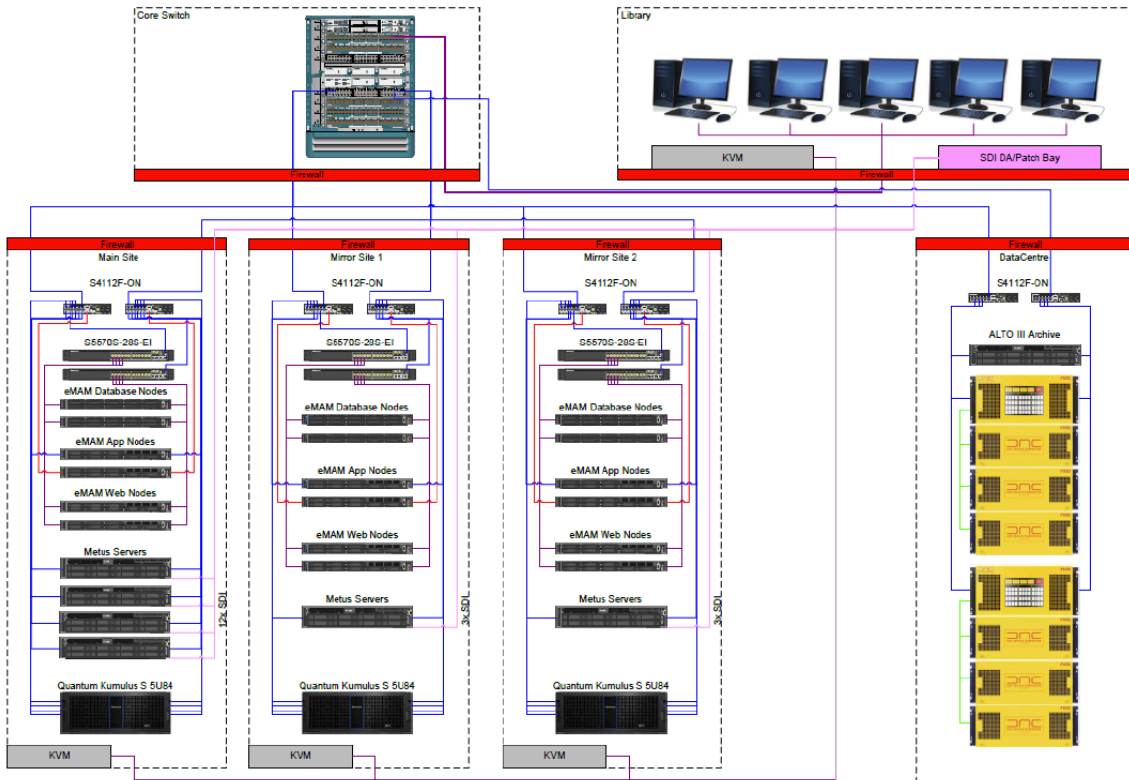
### The Solution

The Horse Racing Club deployed **eMAM Enterprise** as a centralized platform to unify ingest, metadata management, workflow automation, and archive.

## Multi-Site Enterprise Architecture

- Main site for primary operations
- Two mirror sites for disaster recovery
- High-speed SAN storage connected via 100Gb infrastructure
- File-based replication between sites

### Architecture Diagram



- eMAM Web, App, and Database nodes are deployed across all sites
- Storage and archive systems are integrated into the workflow
- Mirror sites provide full redundancy and failover capability

## A. Ingest & Metadata Workflows

The system supports three distinct ingest workflows, enabling flexibility across all race production sources:

### 1. Baseband Ingest (Live Capture)

Live feeds are captured via METUS ingest systems, which simultaneously create both high-resolution media and proxy files for immediate access. Once ingested, assets are

automatically placed in eMAM watch folders, ensuring a seamless, efficient workflow from capture to availability.

Content is sub-clipped by race segment and enriched with metadata.

## 2. File-Based Ingest with Structured Metadata

EVS race content is ingested alongside Excel metadata, enabling eMAM to automatically parse the Excel files and match the metadata to their corresponding video assets. eMAM then generates XML to populate both asset and marker metadata, streamlining the organization and searchability of race content without any manual intervention.

## 3. File-Based Ingest without Metadata

Content from EVS and EFP cameras is ingested into eMAM via watch folders, where proxies are automatically generated using FFmpeg for immediate accessibility. Once ingested, metadata is then added manually within eMAM, allowing operators to apply accurate and context-specific information to each asset.

These workflows ensure that all race content—regardless of source—is normalized into a consistent, searchable structure

# B. Automated Metadata & Content Organization

A key innovation in the deployment is the automation of race metadata ingestion. Excel files containing race data are parsed automatically by eMAM, extracting critical fields such as race details and winning horse information. Additional data is then applied as searchable tags, significantly reducing the manual effort required to catalogue and organize race content.

The metadata schema underpinning this workflow is comprehensive, capturing race season, race number, location, and track, as well as detailed horse, jockey, and trainer information. Race results and placements are also recorded, ensuring that every asset is enriched with the contextual data needed for efficient retrieval and reporting.

eMAM enables metadata tagging at multiple levels, providing granular control over how content is described and accessed. At the asset level, race-level data is applied broadly across an entire recording, while marker-level tagging allows specific race events or segments within that asset to be identified. Sub clip-level tagging goes further still, enabling individual highlights to be isolated and described independently.

This multi-tiered approach empowers users to search by horse, jockey, or race, and to instantly locate specific race moments without manually scrubbing through footage. Highlight clips can be quickly identified and packaged for distribution, making the system a powerful tool for both archival purposes and for the rapid turnaround of race content.

## C. Migration of Legacy Content

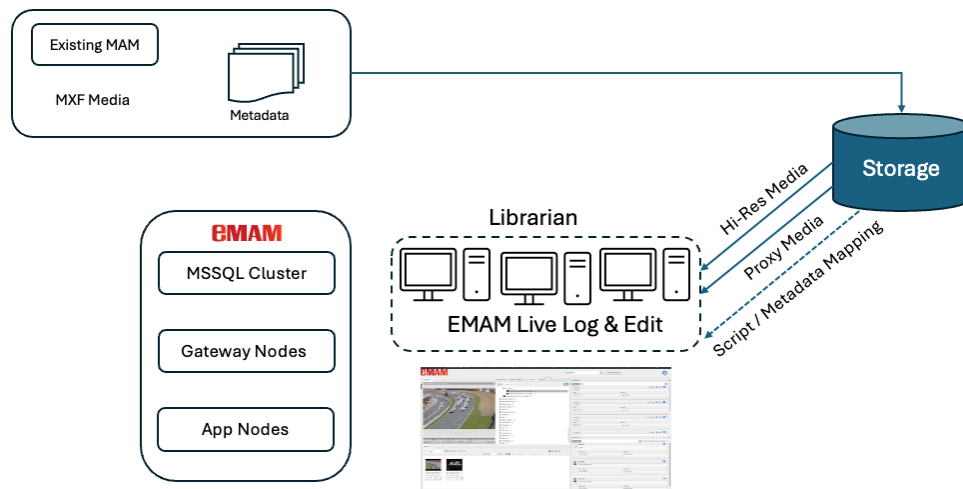
The Horse Racing Club successfully migrated a large historical archive into eMAM:

The archive spans content dating back to 2019 and encompasses hundreds of thousands of Excel metadata files, each associated with corresponding video assets organized into race-day structured folders. This extensive and methodically arranged library forms the foundation of the media management system, ensuring that years of race content remains accessible, searchable, and ready for use.

Legacy media restored from existing systems was migrated into eMAM by dropping both the media and its associated metadata into designated watch folders. eMAM then took over automatically, matching each media file with its corresponding metadata, generating structured metadata records, and linking the original Excel files directly to their associated assets. This process ensured that the full historical archive is brought into the system with the same level of organization and searchability as newly ingested content.

This automated process significantly reduced manual effort and ensured data integrity across the archive.

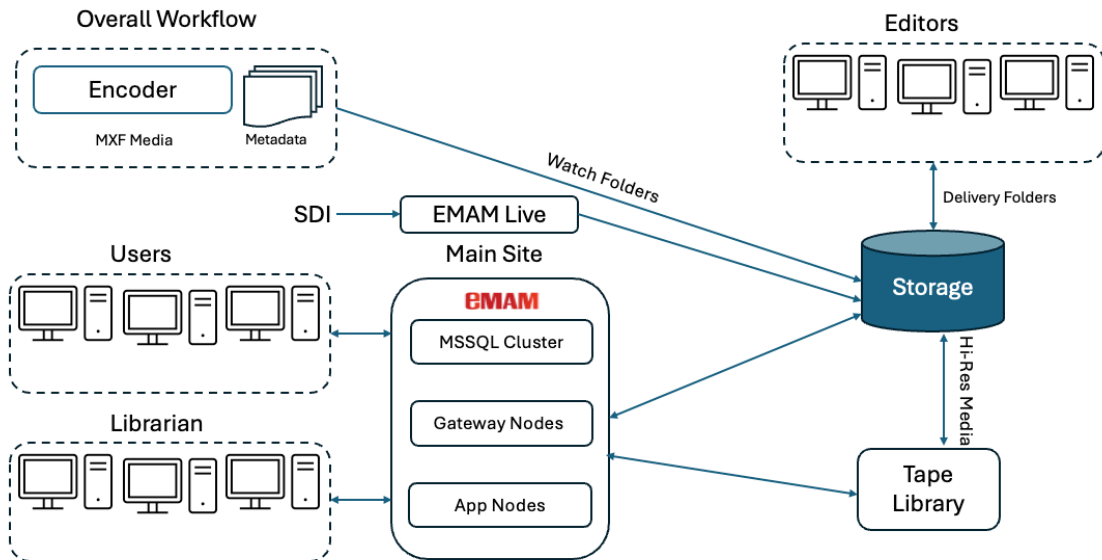
Migration Workflow



## D. Production & Editing Integration

Editors and production teams access content directly within eMAM through seamless integrations with Adobe Premiere, After Effects, and other industry-standard tools. From within these applications, users can search and preview proxy media, import clips directly into their editing timelines, and export finished content back to eMAM once complete. As illustrated in the overall workflow diagram, editors access media via dedicated delivery folders, with proxy viewing enabling flexible remote workflows. High-resolution media is

then retrieved as needed for finishing, ensuring that bandwidth and storage are used efficiently without compromising the quality of the final output.



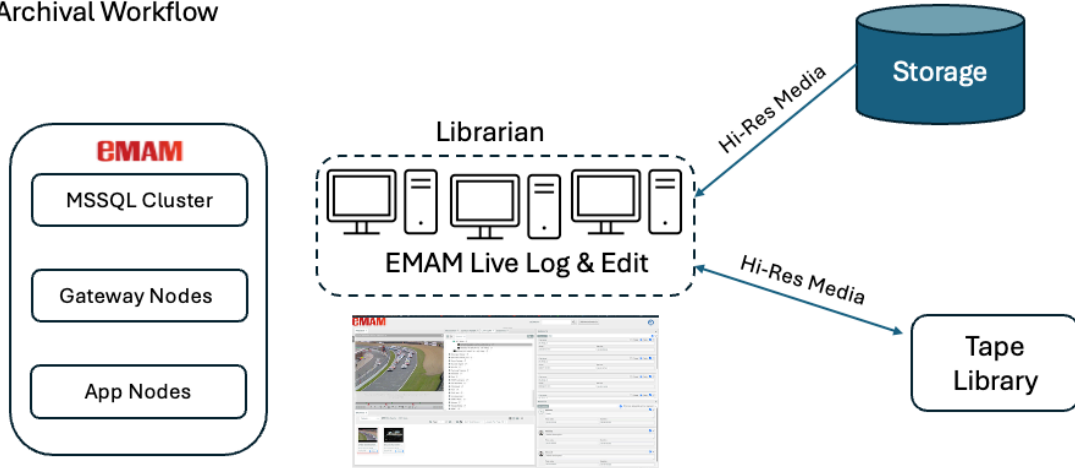
## E. Storage, Archive & Lifecycle Management

The system uses a tiered storage strategy designed to balance performance with cost efficiency. Active production content is held on online SAN storage for immediate access, while assets are automatically archived to LTO via DAC ALTO after 30 days. Seamless restore workflows ensure that archived content can be retrieved quickly and without disruption to ongoing production activities.

As outlined in the archival workflow diagram, assets are moved to archive automatically based on a predefined policy, removing the need for manual intervention. Critically, metadata remains fully searchable throughout the entire lifecycle of an asset, meaning users can locate and request archived content at any time, with restoration available on demand.

This tiered approach delivers a cost-effective storage model that avoids the overhead of keeping all content on high-performance storage indefinitely. At the same time, it ensures the long-term preservation of the full race history, while maintaining the immediate accessibility that production and editorial teams require when revisiting older content.

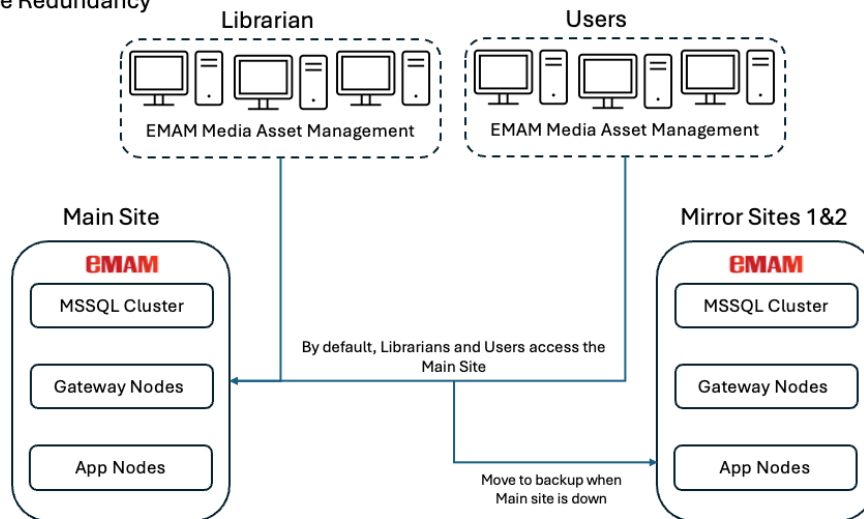
## Archival Workflow



## F. High Availability & Disaster Recovery

The deployment includes a disaster recovery (DR) setup where all operations run on the main site, while two backup sites remain offline with recent backups maintained. In case of a failure, a backup site is manually activated through database restoration, license application, system startup, and DNS update. Although failover is not automatic, the preconfigured DR environment helps restore operations quickly and minimizes downtime for critical media workflows.

### Site Redundancy



## **Results & Business Impact**

Following implementation, the Horse Racing Club achieved significant gains in operational efficiency through automated ingest and metadata workflows, resulting in a substantial reduction in manual data entry and freeing production staff to focus on higher-value tasks.

Search and retrieval capabilities were also greatly enhanced, with teams now able to instantly locate race content by metadata. Faster highlight creation and improved content reuse have streamlined production turnaround, enabling editorial teams to respond quickly to broadcast and distribution demands.

The multi-site architecture provides the scalability needed to support growing content volumes, while remaining flexible enough to accommodate future workflow expansions as the organization's needs evolve.

Collaboration across the organization has been transformed, with editors, librarians, and end users all working within a single unified system. Remote and on-site teams can operate seamlessly together, removing the friction that previously existed between distributed workflows.

Successful migration and normalization of historical assets was a cornerstone of the project, ensuring that decades of legacy content were preserved and made fully searchable.

Finally, the deployment delivers a resilient infrastructure with full disaster recovery capability and high availability across multiple sites, ensuring that mission-critical race media systems always remain operational and accessible.

## **Conclusion**

By implementing eMAM Enterprise, the Horse Racing Club has transformed its media operations into a fully integrated, metadata-driven media supply chain. The system now supports high-volume ingest, automated metadata enrichment, and advanced search and production workflows, alongside reliable archive and disaster recovery capabilities. Together, these features provide the Club with a future-ready foundation that not only meets the demands of today's fast-paced race broadcasting environment but is well-positioned to scale and evolve alongside the organization.

This deployment positions the organization to maximize the value of its race content while supporting future growth and innovation in sports media operations.