Case Study

The Oireachtas (Irish Parliament) uses Baton to ensure Readiness of its Media Content

Background

The requests to make rich media content available anytime, anyplace and in any format continues to push organizations worldwide to implement automation into their digital media workflows. As digital media content grows, there is a growing need for proper archival and the ability to access past content without deterioration of quality.
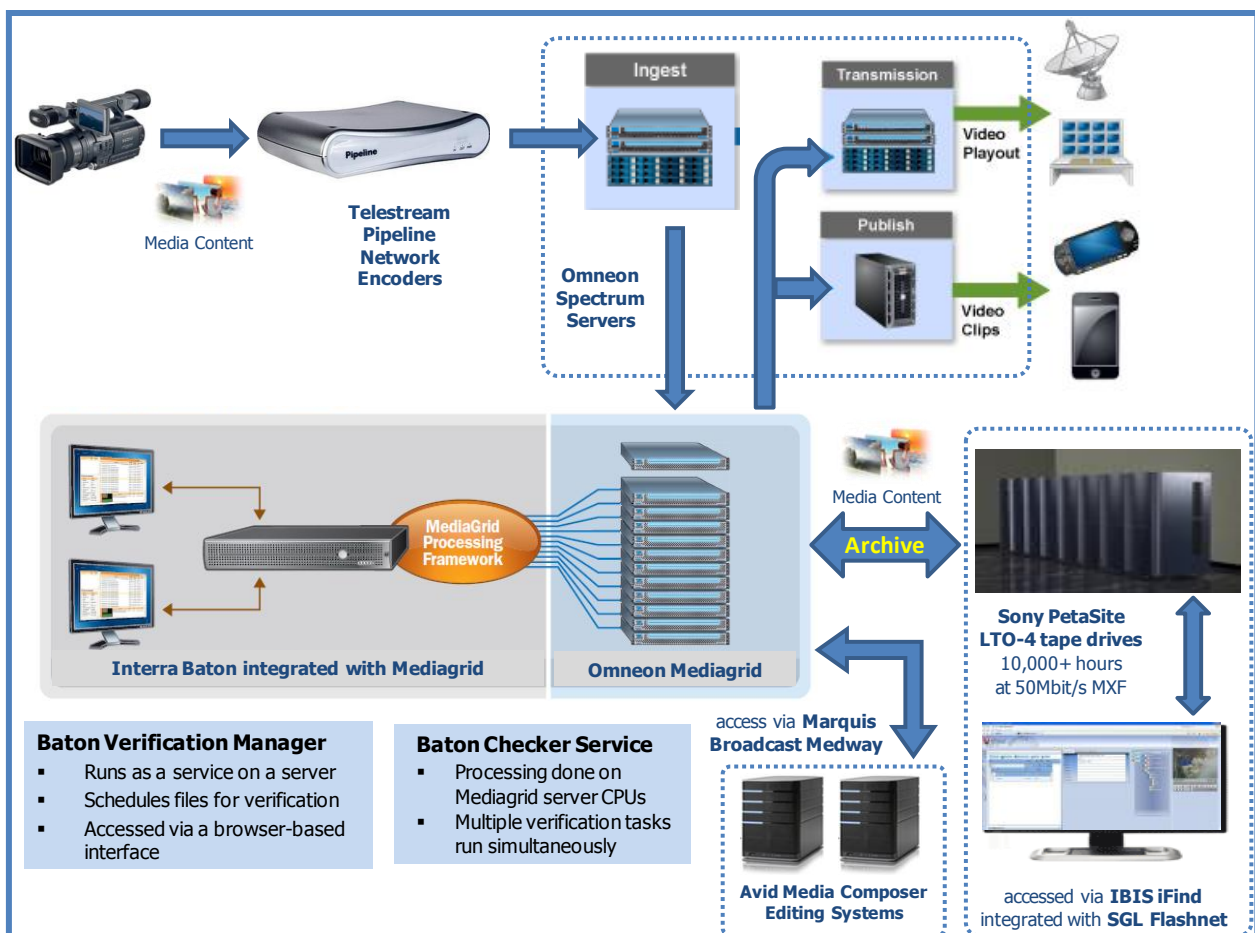
Eurotek Ireland Ltd., a Dublin-based systems integration company, was contracted by the Oireachtas Broadcasting Unit (OBU) to provide a digital acquisition and archiving system for the Houses of the Oireachtas (Irish Parliament) to replace the existing Sony Newsbase system.

Working closely with OBU and with Windmill Lane Ltd's Leinster House Television division (LHTV), who are responsible for technology and operations of the Broadcasting Unit, Eurotek were able to ensure the tight deadlines were met and install the new system with minimum disruption to the unit's operations.

As a key imperative to providing access to content, OBU required automated content verification of all incoming & outgoing content, while avoiding high resource requirements given the large content volume.

Solution Architecture

The system is based around IBIS iFind tools, with Omneon Spectrum servers, Omneon MediaGrid Active Storage System, and integrated Interra **Baton** automated QC software. This includes Telestream Pipeline network encoders to provide a redundant recording path into the Omneon MediaGrid. Two Avid Media Composer editing systems, with MOJO-DX hardware, are provided for craft editing, with Marquis Broadcast's Medway providing media transfer between the servers and editing suites.

Baton Verification Manager
- Runs as a service on a server
- Schedules files for verification
- Accessed via a browser-based interface

Baton Checker Service
- Processing done on Mediagrid server CPUs
- Multiple verification tasks run simultaneously

The recorded media is archived to a Sony PetaSite with LTO-4 tape drives, providing in excess of 10,000 hours of media storage at 50Mbit/s MXF wrapped media. SGL Flashnet archive management software provides comprehensive rules-based archive management, and is integrated into the IBIS iFind software suite, providing the operational staff with a very easy to use interface to archived media. Key to this project is access to growing files transferred to the Omneon MediaGrid and managed by IBIS iFind in order to allow operational staff to mark points of interest, add metadata and produce highlights with the incoming media.

The system is designed to supply up to 12 channels of simultaneous ingest/playback via the Omneon Spectrum server, providing primary recording of the output of the OBU's two main chamber production galleries, and four committee room galleries, with additional channels for playback, lines recording, and other requirements.

"As described above, the solution required diverse software and hardware infrastructure. Baton for QC helped us achieve two major objectives – Minimum content duplication and maximum value out of the full solution for content readiness. Baton's extensive solution scope and integration readiness with the rest of infrastructure helped us achieve our objectives easily", said Kevin Moore, Director, Eurotek Ireland.

The fast pace of digital content today demands that verification systems must operate on a 24x7 basis and ensure content readiness across all stages of the content lifecycle.

Baton is used by a range of global media companies to ensure content readiness throughout their content lifecycle - from Content creation to content aggregation to Content distribution. Baton is well differentiated from competitive solutions based on its built-in support for extensive formats, most complete quality checks, enterprise scalability and ease of use. Using Baton, customers can achieve a 24X7, automated, objective method to ensure content readiness.

The Omneon MediaGrid active storage system combines clustered storage with grid computing, using multiple interconnected-yet-independent nodes to create a scalable system that can serve as a grid-processing engine for processor-intensive media processing applications.

Baton uses the Omneon MediaGrid Processing Framework to harness the processing power of dozens of CPUs within MediaGrid to verify content. Baton's core is the Verification Manager engine, which runs on a Windows server and connects over Ethernet to the MediaGrid active storage system. To speed the process, Baton verification tasks are executed in parallel on the many CPUs in the MediaGrid.

Baton Content Readiness goes well beyond the traditional QC with built-in support for most formats including SD and HD, audio/video checks, metadata extraction & pre-defined play-out.

Solution Benefits

- Achieves content readiness with minimal investment in additional verification hardware or digital island storage.
- Content Verification in-place reduces load on network infrastructure, with no need for additional client network bandwidth.
- Significant increase in performance over standalone QC appliances, streamlined maintenance of the overall system.
- Simplification of workflow by minimizing file transfers between the storage system and any external processing systems.
- Comprehensive formats support – Container, Video & Audio
- Most complete quality checks – including blockiness, blurriness, flashiness, loudness, Field-order detection.
- Enterprise Scalability - including software maturity, Automatic Testplan generation, Partial verification, Verification scalability across servers/cores, High-availability etc.

"We selected Baton because it helped us ensure quality of our content – without investing in additional hardware or network resources. The performance was excellent given the extremely high volume of our media content"
– John Brady,
(Technical Director, LHTV)