

European Parliament Case Study

About The European Parliament

Opened in 1979, the European Parliament (EP) is the directly elected institution of the European Union, and one of the world's most powerful legislatures. To make its work accessible to the European population and beyond, the EP has its own audiovisual unit, which, besides providing broadcasting services on an internal cable television network, delivers video streaming to the Internet and publishes to FTP servers. The unit also provides transmissions to Europe by Satellite (EBS), the news exchange networks, and selected television channels.



The mission of the EP audiovisual unit thus is integral to the core democratic mission of the Parliament itself, ensuring that the electorate to whom the Parliament is responsible can see and study the record of the decision-making process.

The audiovisual unit also oversees the EP's media archive, which is maintained for the legal and historical record as well as for the use of members of Parliament, journalists, and scholars. While the EP assumed its present form in 1979, its roots stretch all the way back to 1952. In the Parliament's more than half century of existence, its archive has amassed a unique audiovisual collection that chronicles a significant part of both European and world history.

In 2008, the EP recognized that the addition of a new building, D5, to their operation presented a unique opportunity for the implementation of a centralized digital archive storage system. Today, the EP's centralized digital archive is believed to be both the first in Europe to include an integrated end-to-end system for migrating analog content into the fully managed digital realm, and the first of its kind implemented with the express purpose of ensuring governmental transparency.

The centralized digital storage system has given archivists access to a broader spectrum of the collection than they ever had before, supporting one of the European Parliament's core missions, to make its records — and more than 50 years of European history — available to researchers and the media.

The Challenge

Archivists at the European Parliament had for a long time been aware that the lack of consistency in storage formats created headaches whenever they sought to find, identify, or retrieve specific content. Content that cannot be accessed might as well be lost for good. A further problem was that videotape's shelf life is limited, with time inevitably leading to its deterioration. As a result, preservation of some irreplaceable, historic content in the European Parliament archive was in jeopardy.

Implementation of the centralized digital archive storage system was intended to serve multiple purposes. Because the collection had been accumulated over time, it was stored in multiple formats. Thus, one of the D5 project's goals was to migrate that content into a uniform and readily accessible format. At the time the project was initiated, some of the archival content was already stored in digital format — on a Sony data tape system. However, most of the content was still stored in analog format, on Digital Betacam videotapes, and a still smaller percentage remained on Betacam SP videotape while some was on very old analog videotape and vinyl.



The Solution

Because a fundamental project goal was preserving the historic record, a key component was the migration of some 12,000 hours of EP's legacy media content from storage on videotape into the managed digital environment — a process that was completed on time in January 2010. To accomplish this, the EP audiovisual unit and Broadcasting Centre Europe (BCE) deployed six Front Porch Digital SAMMASolo systems arrayed in a set-up with legacy VTRs and

interfaced to an existing Sony Flexicart system. The SAMMASolos' flexibility enabled them to work in tandem with the legacy FlexiCart systems, reducing overall project costs.

The EP had set the goal of completing the migration as early as possible in 2010, making it necessary to find the most efficient possible system for accomplishing it. The SAMMASolo is a semi-automated system that performs real-time, simultaneous encoding of content from videotape into multiple digital files, and then manages their ingest into the digital workflow. An essential aspect of the project's cost-effectiveness and its ultimate success was the SAMMASolo's flexible capability of interfacing with the audiovisual unit's existing system. Likewise, the SAMMASolo device has the unique capability of real-time migration of content into multiple digital file formats, enabling the project to meet and in some cases beat its deadlines.

With the migration component, EP's centralized archive has accomplished a first in the annals of European media organizations — an integrated end-to-end system that moves legacy analog video content into a comprehensively managed digital structure. Under the direction of experienced BCE staff and services, the SAMMASolo systems met the target of complete migration of the 12,000-hour videotape archive to digital formats by January, 2010.

Implemented by the EP audiovisual unit and the professional team from Luxembourg-based BCE, the D5 centralized digital archive project integrated all content into a coherent, unified system based on a Sun StorageTek data tape library complemented by near line storage from Isilon connecting to Grass Valley K2 video servers. The system as a whole is unified through the use of a much-expanded and upgraded Front Porch Digital DIVArchive™ content storage management system.

To overcome the challenges specifically related to access, the EP audiovisual unit also implemented Front Porch Digital's DIVAdirector application as an integral part of the centralized archive. Running in combination with DIVArchive and a Harris T-Rex media asset management system, DIVAdirector is enabling the cataloging and tracking of archived media assets, allowing sixteen European Parliament editorial staff archivists to browse content in the form of automatically generated low-bit-rate proxies, to create frame-accurate shot lists, and to use customizable metadata to find and identify specific media using query tools. In contrast to a videotape archive, the centralized digital system supports the archivists' efficiency by enabling them to enjoy simultaneous, high-speed access to content.

An integrated hardware and software solution, DIVAdirector features mirrored system disks and RAID 5 storage for Windows Media® 9 proxies. Because DIVAdirector can import legacy databases of virtual assets, such as those still stored on videotape, along with

their associated metadata field mapping, it made it possible for the EP to track even content that was not yet digitized. Once file-based content and proxies have been ingested, DIVAdirector automatically links them to their appropriate virtual assets. Thus, the system enables consolidation of comprehensive data on all EP's media collection via a single interface.

As a cost-effective media-tracking solution for the European Parliament, DIVAdirector became the central consolidation point for information about and access to all the media stored within the system. The archive itself is modular and consists of a robotized library, which supports the MXF digital file format, stored on a long-life LTO4-type IT support. In its final configuration, the archive's storage capacity will be 340 TB (15,000 h at 50 Mbps), with 900 cartridge slots, 10 recording and reading machines, a loading speed of less than 30 seconds per cartridge, and access speed to a single cartridge file of 90 seconds or less.



Advantages and Benefits of the Solution

According to the EP audiovisual unit's staff, the centralized digital storage system has given their archivists access to a broader spectrum of the archive's collection than they ever had before. This supports one of its core missions, to make the record of the European Parliament — and in fact of Europe, over more than 50 years of its history — available to the media. As a result of this project, some of the content is being made available for the first time. Just as important, the project ensures preservation of this record for future generations. Working with BCE to devise an innovative combination of best of breed technologies, the EP has been able to maximize resources while creating a centralized storage system that meets its needs and serves the public.

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