

BBC World Service

For a global broadcaster like the BBC's World Service, working more efficiently across the business is now the main priority. A well implemented content management strategy and workflow could unify operations, and allow for greater reliability in scheduling work in progress and archived material.

The Challenge

Pharos has worked with BBC World Service for over 10 years helping to deliver new systems that maximise the efficiency and reliability of its global radio news operations. The World Service needs to respond quickly and cost effectively to a fast changing media landscape. To complement the implementation of several new technologies, Pharos has also played a key role within the World Service Content Delivery Programme (CDP) in helping to devise new processes throughout the enterprise to better manage users, content and infrastructure.

To date the partnership had already delivered a unique and large-scale IP-based network operations centre (NOC) to better manage content distribution and network routing. The new NOC now handles 1000's of daily switching and playout operations, these are distributed by satellite and 150 different transmitter sites worldwide. World Service sought to complement this better infrastructure control and network management with next generation content management and new workflows. The ultimate goal was to bring all areas of operations, from ingest to approval, to the desktop for all parts of the organisation and to deliver a true enterprise approach.

BBC World Service long term requirements included:

- Flexible scheduling of each playout network from the new Pilat IBMS channel management system and directly from new Regional Operations Centres (ROCs)
- Multi-site operations with desktop browse for large numbers of concurrent users
- A workflow driven ingest and record process to enable more efficient import of content produced by multiple programme suppliers around the world
- Flexible delivery of material to multiple platforms for both traditional linear broadcasting and new on-demand services
- Highly resilient playout infrastructure with seamless redundancy.

Business Benefits of BBC World Service

- Integrated content management and workflow at the desktop for all users with Pharos Mediator
- Operational efficiencies using content management to manage multiple versions of each programme to increase output
- Integrated automation and router control for the NOC using Pharos Playtime
- Streamlined operations using desktop workflow across the enterprise
- Clear visibility of each schedule and access to planned content across the business community and to international broadcast partners
- Mediator provides a scalable platform to meet the demands of the business for multiplatform distribution.

Key Functionality for BBC World Service

- Direct integration between Pharos content management, automation and control subsystems
- XML protocols used to communicate between all integrated third party subsystems
- Enables manual intervention with automated schedules for breaking news and reactive changes
- Comprehensive Pharos system alarm and monitoring capabilities
- Content scheduling and distribution (CSS) is directly integrated with media workflow and playout (Mediator and Playtime)

Nigel Fry – Head of Transmissions and Distributions, BBC World Service

"The overall system enables us to respond more quickly to late-breaking editorial changes and is scalable to meet changing demand"

BBC World Service

The Solution

Pharos was selected to supply integrated content management and automation for 68 channels of complex radio programming. 32 channels are configured as a complete playout-capable subsystems, and are all fully mirrored. As prime contractor Pharos provided the automation for the playout and time-shifting sub-systems. A detailed technical specification was produced in collaboration with the WS Content Delivery Programme (CDP) and Pharos Project services worked closely with the BBC to complete the design and derive the system acceptance criteria.

Pharos has pioneered several aspects of the new architecture including:

Integration of an Isilon multi-node based online storage subsystem for content storage and delivery across the organisation.

Pharos also developed a high performance audio server subsystem.

Router control was also a key challenge with 1000's of on-demand sources and destinations around the world. The audio routing system comprises dual LAWO Nova73 routers scalable up to 8,192 mono channels.

The Pharos Mediator platform brings efficiencies by unifying an end to end workflow with channel operations. At World Service, Mediator integrates ingest, media workflow, transfer management, router control and playout. This includes web based user interfaces for operators working at their desktop to search and browse any material. Mediator provides a sequence of task based views; to operators and supervisors guiding them through the workflow, and to support staff to enable straightforward system administration. Mediator is schedule aware and able to prioritise workflows and manage resources. At World Service the file upload ingest process is driven by information from media upload requests and TX schedules imported from the Pilat Media supplied content scheduling system (CSS).

As material becomes TX ready it is made available to the Pharos Playtime automation for secure playout, in conjunction with live and scheduled programmes which are switched under Pharos control from studios and other sources. All materials' workflow states are tracked on-screen and will be used to generate reports and update the material preparation status in the CSS.

The new system is based on existing enterprise workstations running standard web browsers, connected via the BBC's Reith intranet. Where previously staff interacted with individual audio and video elements, content is now accessed from a common archive, processed and then returned.

Why Pharos?

"Pharos Mediator and Playtime systems meet our demanding user requirements to operate multiple networks and offered the most efficient solution for us. BBC World Service has had a close relationship with Pharos over many years. They have a lot of experience of the broadcast industry and they bring a lot of technical creativity to the table which helps us address the challenges we face" says Nigel Fry Head of Transmission and Distribution BBC World Service

Pharos project services were commissioned to look at the current operation and run a series of workshop sessions with staff to create an outline requirement for a future playout and routing infrastructure to cover the entire World Service operation.

This latest contract was awarded after a lengthy OJEC process. BBC World Service conducted a full quality audit which Pharos passed with high recommendations.

This case study

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