



CASE STUDY

Imperial War Museums digitally preserve the history of modern war indefinitely with Spectra Digital Archive



When we set out on our search to find a storage solution capable of preserving Imperial War Museums' substantial digital archive, there were specific criteria on which we were not willing to compromise. Spectra met all of our requirements and then some, and now continues to deliver with its Spectra Digital Archive solution.



Ian Crawford,
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CHALLENGE

IWM is home to hundreds of thousands of films, videotapes, audio recordings and photographs that must be preserved forever but won't last on their original media. They currently store an archive of around 750,000 digital assets, which amass a total of 1.5PB as uncompressed files. Their digital asset collection includes 5,000 film and video scan masters, 100,000 audio masters dating back to the 1930s, nearly 500,00 image masters and thousands of lower resolution versions (access versions for commercial and web use) of the above assets. New scans in their film collection generate an additional 10TB of data per month, and the videotape scanning project is expected to create another 900TB over four years.

SOLUTION

IWM, a long-time Spectra Logic customer, installed a Spectra solution at their Duxford data center to preserve 5PB of content. They expanded the solution to their London data center, leveraging existing Spectra hardware. The solution includes Spectra StorCycle, BlackPearl Nearline Gateways, BlackPearl NAS, and Spectra Tape Libraries. Five workflows run in the environment. Film scans are written to tape via BlackPearl Nearline Gateway. Audio, image masters, and access versions are stored on BlackPearl NAS, accessible through their DAM system. Files are backed up to tape with an automated Java script, and a secondary backup with BackupExec sends film data to a partition. StorCycle helps offload inactive data to tape, identifying files older than two years and larger than 1GB. The Spectra Digital Archive provides the capacity, reliability, and longevity IWM needed, backed by Spectra's award-winning support.

AT A GLANCE

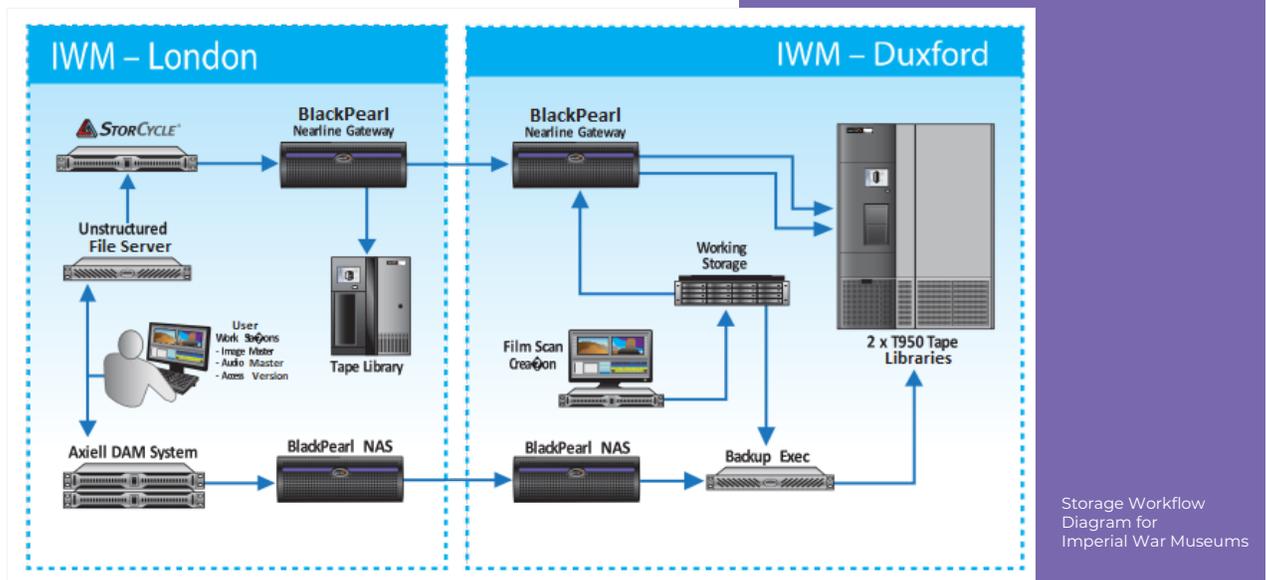
Challenges

- Unreliable storage solution
- Insufficient storage capacity
- Short lifespan of media
- Growing data storage needs

Solution

- Leverage existing Spectra tech
- Deploy Spectra Digital Archive
- Use BlackPearl for storage
- Automate data offloading





Storage Workflow Diagram for Imperial War Museums

IMPERIAL WAR MUSEUMS' ENVIRONMENT

SOLUTION INFORMATION

Spectra Digital Archive (SDA) is a complete hardware and software solution powered by Spectra's StorCycle software to provide digital preservation for data at scale. SDA is designed for cost-effective bulk archive, project archive and automated long-term archive. Components include:

- **Spectra StorCycle** – StorCycle automatically identifies and moves data from primary storage to a lower cost tier that includes cloud, object storage disk, network-attached storage and object storage tape.
- **Spectra BlackPearl** – BlackPearl provides an object-based, hybrid storage platform that easily and cost-effectively scales up as object and file volumes grow; adapts as operational requirements change; and enables easy synchronization of data between on-prem and cloud storage.
- **Spectra T950 Tape Library** – The T950 library affordably scales in capacity and supports multiple generations of current and future tape formats. From the greatest storage density to proactive media management, the T950 is always protecting your data.

Why Imperial War Museums Chose Spectra:

- Reliability
- Ease of Use
- Tape's Capacity and Scalability
- Product Longevity
- Effortless data migration, access and preservation with StorCycle

ENVIRONMENT

- Spectra® StorCycle® Enterprise Software for Digital Preservation
- Spectra® BlackPearl® Nearline Gateway with Object Storage Disk
- BlackPearl® NASi
- BlackPearl® Eon Browser
- Spectra T950 with LTO-7 tape drives
- Spectra T950 with IBM® TS1150 tape drives
- Veritas BackupExec
- Java CLI

ABOUT IWM

IWM (Imperial War Museums) tells the story of people who have lived, fought and died in conflicts involving Britain and the Commonwealth since the First World War. IWM's five branches attract over 2.5 million visitors each year and house a collection of over 10 million objects. The branches are IWM London, which will open extensive new Second World War and The Holocaust Galleries in October 2021; IWM North, housed in an iconic award-winning building designed by Daniel Libeskind; IWM Duxford, a world-renowned aviation museum and Britain's best preserved wartime airfield; Churchill War Rooms, housed in Churchill's secret headquarters below Whitehall; and the Second World War cruiser HMS Belfast.