

## The Client

BBC Wales were moving their headquarters from an aging (but much loved) facility in the suburbs of Cardiff to a state-of-the art new facility in Central Cardiff. Several Petabytes of library and in-use media content ranging from news rushes to edit projects to finished programmes needed to be migrated from legacy file storage systems to new systems in the new facility.

## ABCI's engagement

We were initially appointed to define technical workflows and operational processes to migrate from a variety of legacy storage systems to new storage systems. During the project we were appointed to supply and install equipment required for transportation of content and ingest of legacy LTO-4 tapes.

## What we did

After a discover phase where we captured total volumes on each legacy storage platform, several strategies were defined with associated timescales and costs. Due to time constraints and technical limitations of network connectivity between old and new sites, a removable storage model was agreed.

No part of the migration process was to affect in service operations at either the legacy site (which was still in use) or the new site (which was in commissioning and testing).

We defined file copy processes (copy from legacy storage to removable storage, physical transportation, copy from removable to new storage), time sequencing (there was limited budget, so limited removable storage devices) and final resting storage tier. For aging LTO-4 migration, 2<sup>nd</sup> externalised copies of tapes were removed from a legacy Sony Petasite, physically transported and re-ingested using a refurbished LTO-4 tape library in the facility.

We sourced and supplied portable storage devices (multiple 50TB and 200TB units), a reconditioned LTO4 tape library as well as networking components.

We supplied some custom software needed to 'flatten' legacy directory structures, report on progress and provide manifest information needed for new asset management systems.

After an initial short 'proof of concept' phase, we trained an operations team to provide the majority of copy-move-copy effort.

During the year long migration process, we provided front line support for supplied system components as well as issue resolution for damaged files.

## **Project Highlights**

Seeing the clients' legacy content available on new systems, with end users not knowing that anything had really changed (meaning all media files matched up with their asset database) at the end of the project.

## **Biggest Challenge**

Finding spurious characters (semi-colon rather than 'l') in file names regularly caused us headaches. 3<sup>rd</sup> party databases had these characters stored, but when exporting to csv files (delimited by semi-colon) could only be fixed manually. Keeping processes running when this kind of issue arises was critical in order to meet project timescales.

## **What we learnt most**

When content is many years old, there will be a lot of exceptions. As legacy processes evolve over time, it is inevitable that file naming and data structures will change. Dealing with this can add a significant amount of time and effort to this kind of project.

## **Project Outcomes**

All content was successfully migrated from the clients' old facility to the new facility on time. All exceptions were dealt with. The client now has several high-capacity, high bandwidth portable storage devices that can be used for future field productions. The LTO-4 library will be retired