ISILON® SYSTEMS

How breakthroughs begin.™

Isilon IQ Case Study

Channel Five Group

Applications

Clustered storage for Broadcasting

Challenge

Since it launched in 1997, Channel Five Group has expanded rapidly by adding new digital channels and delivery methods. The breakneck speed of change within the broadcasting industry has required the channel to adapt to new demands and streamline its business model to account for new influences such as the internet, Freeview and video on demand.

Isilon IQ Benefits

- Effectively manage large video files while maintaining system flexibility
- Scale capacity and performance in-line with future requirements for Video on Demand and High Definition TV
- Dramatic cost-savings
- Smooth transition to file-based operating environment

In 1997, Channel Five became the last terrestrial channel to be launched in the UK. From the start, without a legacy infrastructure, Five approached broadcasting differently from its older rivals and relied heavily on outsourcing and partnerships to reduce costs and deliver less expensive airtime. With coverage across 92% of the UK population, Five attracts 11.4m individual viewers each day and has pioneered in a number of areas including the first public UK broadcaster to offer complete TV programmes for download via the internet back in 2006.

Behind the scenes at its London offices, the process of moving programming between different areas and getting content to transmission locations has relied heavily on traditional tape stocks. The logistics of multiple locations for delivery, ingest, technical conversion, compliance regulations, trailer editing and local viewing requires a large volume of transfers and tape distribution ranging from simple VHS to broadcast quality Digibeta.

However, with only one terrestrial channel to manage, the broadcaster grew steadily and its innovative business model allowed it to break into profitability as well as successfully renew its analogue licence. Like most of the broadcast community, the requirements to add more linear channels and move into new digital media as well as expand content into new delivery mechanisms such as the internet, Freeview, satellite and cable started to put unnecessary costs and complexity into the broadcast operations process.

In October of 2006, Five grew with the launch of two new digital channels Five Life (now rebranded as FIVER) and Five US. With even more content moving around the organisation, senior managers started to look at how it could streamline the process of getting content to Freeview, satellite and cable. As Chris Anning, Chief Technology Officer for Channel Five Group explains, "We started looking at the problem in more depth about two years ago and began creating proposals for the board, to explain where we needed to go, how we could extract more value from our content by using new technology and the core benefits of moving to file-based play-out as well as the associated challenges."

For Anning, the project would impact not just on technology but across almost every business process and would require a great deal of planning to bring online without disrupting the day to day running of the channel.

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— Chris Anning, Chief Technology Officer for Channel Five Group

"When we started to break down our processes, we could see a lot of waste in terms of resources and time," comments Anning, "We had a lot of duplicated processes and unproductive activities simply because people could not view or action content until it had been dubbed and sent to the right location. For the long term, a file-based architecture would help us reduce our cost base and make us more productive but we were not in a position to just deploy something overnight without doing a lot of the ground work."

After the board examined the project proposal and agreed that the transition to a file-based structure would benefit the company, a "soft deadline" was set. However, like in many projects, the budget would be spread across the period with the first allocation available immediately.

"Budget is always a good thing to have" comments Anning, "But we were at a stage in the project where we were really just proving concepts and we were not ready to make some of the bigger key decisions such as which media manager to use or encoding technologies, so we began looking at the fundamental things like storage."

For Anning, Storage was a given. "We knew that even at the pilot stage we would need a solid storage platform and as the project was still in a relatively early stage, the storage architecture needed to be highly flexible, able to scale as needed and suitable for the large file sizes and throughputs we need for working with video."

But speeds and feeds were not the overriding consideration, "While the technical aspect of the storage platform is important, we also wanted a technology partner with a vision! Isilon were not only able to deliver a technology for the 'here and now' but also able to share with us where they will be five years down the line." — Comments Anning.

From an initial shortlist of up to 10 prospective candidates, this shrunk to just two that met the criteria of flexibility, scalability and performance. "Isilon impressed us with the flexibility and power of the system" comments Anning, "The ability to scale to our needs and mix and match applications within the hardware was also impressive but what struck us most was the roadmap and the pilot — it delivered on its claims pretty much straight away."

With Isilon selected as the storage platform, Five built a small node as the foundation of an ingest and browse suite. New content arriving at Five is now digitised and made available for browsing via the desktop PC. "It is a relatively early step but we have now replicated this cluster to three of our sites and used it to get our MPLS network, security and replication technologies all working." explains Anning.

Over the next year, Anning and his team will use these initial pilot areas as the basis for testing and evaluation media managers, workflow systems and other related technologies. "For our people, it's an easy way for them to acclimatise to a file-based culture and as the project grows, we can simply add more nodes where required."

Although the project is still 8-12 months away from completion, Anning is confident about their decision to use Isilon as the basis for its storage architecture, "Our industry is often difficult to predict and we have a lot of tough choices to make over our technology but from a storage standpoint, Isilon has already proven to be a good choice and will allow us the freedom to build a technology platform that suits our current and future needs without compromise." He concludes.

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