aQ Broadcast architects the backbone for That's TV growth

The Company

That's TV is a leading local television network, owned by That's Media Ltd and operating multiple city-based stations across the UK. These include services based out of Cambridge, Carlisle, Basingstoke, Preston, Oxford, Manchester, Norwich, Reading, Salisbury, Portsmouth, Guildford, Swansea, Scarborough and York. Operational since 2012, That's TV has rapidly expanded its licenses, recently adding services in Scotland and the Humber.

Each That's TV service produces its own output, the centrepiece of which is a rolling news bulletin transmitted during the evening and overnight, switching to a dedicated shopping channel for the early to late morning period, with longer form content such as films from That's TV's own catalogue broadcast during the day.

The Brief

aQ Broadcast has been working with That's TV for over four years, starting with individual sites and then gradually, as it acquired more licences, migrating its operations to a centralised system. The first stations to launch operated on a local standalone model, which wasn't very scalable. Using a fully integrated aQ technology suite, That's TV successfully converted those sites over to the centralised model in summer 2017 and has been running 24x7 ever since.

The technical architecture for the entire operation, including software systems and hardware components, was specified, supplied and installed by aQ Broadcast to fit with That's TVs workflow. This includes systems for all production and preparation of content, scheduling, 24x7 transmission and archive. The technical operation is also being supported by aQ Broadcast.

aQ Broadcast gallery

The Solution

While production and scheduling for That's TV is handled locally, all transmission originates from a central facility in Birmingham - the Network Operations Centre (NOC). The NOC houses centralised storage with mirroring for redundancy.

All playout for the group runs on aQ aVS transmission servers. In the central system there are seven of these video engines, each providing support for up to three parallel channels, with six machines handling the normal outputs and the sixth serving as an online spare. Each transmission server also provides caption, graphics and branding capability for the channels it supports, based on the specific transmission schedule.

Each region runs its own studio / production centre operated with identical Local Contribution (LC) equipment. This kit includes an aQ Broadcast Production Suite (aPS) providing full studio production capability - vision mixing, audio mixing, graphics, clip playback, clip recording, review and sub-clipping on a set of PC workstations. The aPS also provides storage for locally edited packages. All aPS units are part of the central media asset management (MAM) system, so content on any server is available for central playback.

The LC kit also includes the aQ QSeries suite of software products including QTx for programme scheduling and playout, along with graphics and branding insertion, and QNews for news programme production. An aQ Network Gateway connects each station onto the main That's TV network backbone. This allows a secure private network to be built using separate, standard internet connections.

Media Management

Part of aQ Broadcast's role is to handle all of the media management for That's TV. The broadcaster has hundreds of thousands of clips in its system, distributed between their mirrored central storage and the local studio centres. aQ takes care of tracking all of those assets, including a significant number of automatic conversion, push/pull and archive operations.

Content is normally generated locally, but in some cases sites share material – for instance, Oxford might use occasional clips from Reading and vice-versa. Low resolution proxies are made available to view from any location across the network. The centralised MAM allows Oxford to select clips from Reading for playout in their own schedule and handles the resulting movement of content, when required, automatically.

That's TV Birmingham Studio central kit

This pre-recorded anchor / news-in-a-playlist model is similar to that deployed by Channel One (a UK cable channel previously operational in London, Bristol and Liverpool) and with an earlier newsroom system at NY1 in New York: installations which aQ Broadcast staff were involved with.

As an example, here is a screenshot from the live transmission schedule for That's Manchester, partway through their 2100 programme:

All recordings of presenter links are made locally but can be controlled either directly from the studio or from anywhere else on the network. This enables a remote technical operator to take control of any asset from any location, with storage and movement of media handled in the background by aQ, and ultimately saving That's TV further operational cost.

The extensive MAM functionality also makes it quick and easy for media to be re-purposed for other platforms – for instance, marked content can be sent to social media outlets such as YouTube and Twitter with just a few simple actions.

Storage optimisation

For content to play to air on any channel it has to be available at the NOC on the mirrored store. Since aQ effectively manages every individual local storage as a single media pool, the MAM immediately 'recognises' when any new asset (a fresh recorded link or re-edited package, for example) has been ingested or copied to it.

As soon as it's part of the database, the That's TV team at any of the stations can drag and drop the asset into their particular news schedule without having to worry about moving the content. aQ will automatically copy the asset and transfer a copy to the NOC.

This is possible because of the tightly meshed network in which both local and central stores are connected via aQ Network Gateways running aQ firmware. Such a tightly integrated system means changes made to the running order on any local server are instantaneously identified by the central playout server.

Archive is also under the care of aQ. Any content not used for a specified period is automatically moved off local storage into separate disc-based long-term storage. Since aQ software orchestrates That's TV's overall media repository each asset will still appear in the main database. When there's need to playout the asset again it can simply be added into a transmission schedule, then the underlying MAM handling looks after copying the clip back from archive and into mirrored storage ready to play to air.

The outcome

Dan Cass, CEO of That's TV, commented: *"That's TV would not be able to operate efficiently and effectively every day without aQ Broadcast. We train our new team members on it within minutes and it keeps our local output fresh and up to date, allowing us to update the news across all of our locations every day with technical ease. The system is just brilliant, and Neil and the company have delivered everything they've promised. We genuinely would not be able to produce our local news in the way we do without this system."*

aQ CEO Neil Hutchins commented, *"The schedule for the 2017 That's TV station launches was ambitious to say the least. Each station employs just about everything we make. It's virtually an end-to-end usage of our entire product line. Because we have genuinely written every piece of code, every component is properly integrated as part of the overall system. The full solution delivers exceptionally wide functionality in an exceptionally small footprint and with unrivalled affordability."*

Neil Hutchins, CEO aQ Broadcast

aQ Broadcast is currently working with That's TV on the next phase of the project, which will add a further five services in Scotland, a further local site in Hull, and an expansion of the network's central mirrored storage. There are further plans to build out a deeper longer-term archive with either LTO tape or cloud-based solutions, to provide automated on-screen info-graphics and to develop automated advertisement handling.