

MEDIAHUB AUSTRALIA

Co-operating to compete

**CUSTOMER:**

MediaHub Australia

APPLICATION:

Multichannel playout facility designed, installed, and commissioned by the Grass Valley Systems Group

CLIENTS:

Australian Broadcast Corporation & WIN Television Network.



BACKGROUND

It was not so long ago that broadcasters had one or, at most, a small handful of channels.

Playing out those channels, from a transmission or master control room, was seen as one of the chores broadcasters had to do.

However, for commercial broadcasters it was a mission-critical task: if you do not play out the right commercials in the right breaks, flawlessly, you do not get paid. Even for state or license-funded broadcasters, the gaps between programs were seen as critical to building audience loyalty.

As the broadcast environment became more complex, with more channels and sub-regions to contend with, so the role of playout necessarily turned to automation. As commercial pressures grew, some broadcasters began to look at automated playout as a commodity which was no longer core to their business of winning and retaining audiences.

For some broadcasters with only one or two channels—the American local

station model, for example—a simple in-house automation system was fine. For big channel aggregators, the economies of scale meant that an in-house, multichannel, highly automated playout center remained cost-effective.

But for a very large number of broadcasters, outsourcing playout became a very attractive option, and a number of international specialists sprang up to meet the demand.

In Australia, though, a different—and radically adventurous—alternative gained momentum.

The Australian Broadcast Corporation (ABC) is the country's state broadcaster, charged by Parliament to deliver innovative and comprehensive broadcasting services. Its television services reach 98.2% of the Australian population via analog and 95.8% through digital. High-definition channels have been available since 2008.

The WIN Television Network is the world's largest privately owned regional commercial television broadcaster, transmitting in all six Australian states and the capital territory. It reaches 42%

of the nation's homes in 27 markets, and its transmissions span the largest geographical area in the world. It was the first regional broadcaster in Australia to launch an HD service, 12 months ahead of government requirements.

The long-established state broadcaster and the dynamic and hungry commercial rival seem unlikely bedfellows. But they have come together to pool their resources and develop one of the world's most advanced playout centers: MediaHub Australia.

"This state-of-the-art facility has transformed the capability and capacity for delivering television programming to audiences. With the help of Grass Valley's engineers, we now provide our clients with more options for content delivery than ever before."

Andrew Hogg, CEO
MediaHub Australia

CO-OPERATION

Inevitably, reaching this state required lengthy discussions, covering operational as well as commercial matters. The new joint venture, if it was to succeed, had to be a platform capable of supporting not just complex multichannel linear television services but online and on-demand offerings as well.

An agreement was reached, and MediaHub Australia represents unprecedented co-operation between two competitors: a government (non-commercial) and a commercial broadcaster. While there are third-party playout centers which serve both commercial and license-funded broadcasters, MediaHub is unique in being developed solely by its two main users.

Located in a western suburb of Sydney, it is a single, very large-scale digital playout facility. It was designed and built from scratch to deliver cost-effective, enhanced delivery services that will meet the challenges of the future by increasing the programming capability and capacity of these two Australian broadcasters.

ABC and WIN developed the requirements specification of the center, and then turned to Grass Valley™ to turn it into a reality. Having reached this concord, ABC and WIN were anxious to take advantage of the new facility as soon as possible, and set an extremely challenging project timeline. The design phase was completed in just four months. Installation and commissioning took around six months, with the first service (national ABC3) going live less than ten months from the awarding of the contract.

It is the government mandate of ABC and the commercial requirement of WIN to provide well-targeted local services to the different states, time zones, and communities in Australia. As a result, the two broadcasters transmit the equivalent of 130 channels from MediaHub. This is less than half of the 300 channel capacity of the center.

The center is designed with excellent resilience as its first priority, to ensure non-stop availability. That includes fully redundant power feeds and air conditioning services, as well as geographically diverse connectivity, with the provision of up to four telecommunications providers and a satellite platform with both up and downlinking capabilities.

The entire operation is, of course, HD capable, with any channel switchable between SD and HD at any time. Although there is the capability of ingesting from tape and the ability for live broadcasting, MediaHub is entirely file-based. As well as speeding and simplifying media handling, it allows for content in the future to be transcoded and transwrapped as needed to make it available for online, mobile, and on-demand platforms.

Key technical components of the center include switching and routing by Grass Valley, including the next generation Trinx™ NXT routers with Jupiter™ control software, dozens of K2 media servers, Maestro™ HD master control and branding systems, GeckoFlex™ signal processing modules, and NetCentral™



SNMP-based facility monitoring software. Playout automation is provided by multiple Morpheus systems from Snell.

Providing overall workflow control is the Grass Valley ContentShare™ platform. This serves as the interface between MediaHub Australia and its clients' individual production centers. It also provides overall asset management control. The file-based architecture delivers incoming content to a nearline storage array, allowing for the broadcast quality content to go through a quality control process and the ability for remote browsing of the content. ContentShare² interfaces with the Snell Morpheus automation system to move content to the playout servers as required. ContentShare² and Morpheus then provide missing content lists which automatically request content from the archive systems in the clients' remote production centers.

The entire architecture was designed, installed, and commissioned by the Grass Valley Systems Group. In conjunction with MediaHub, Grass Valley also devised and delivered a comprehensive training program to the MediaHub operational and technical teams that operate the facility. MediaHub also engaged Grass Valley to provide on-going support and development.

MediaHub Australia provides a central location for all broadcast and online services for ABC and WIN. Around 60 staff in total manages all the ABC and WIN channels, including multiple live content streams, regional variations, and time shifts across the huge country.

But perhaps even more important than the technical achievements of MediaHub Australia is the statement it makes. In the digital, multi-platform, diverse television future, competing broadcasters can come together to create something mutually rewarding: a shared resource to enable them individually to meet future challenges.

GLOBAL SERVICES



Grass Valley Global Services specializes in the defining of, deployment of, and support of today's dynamic file-based workflows, based on Grass Valley and third-party solutions. With Grass Valley Global Services, you can achieve your operational goals in the most efficient and cost-effective way possible with a partner you can trust.

www.grassvalley.com/support

Define: We help you to define your business and technology requirements and then design solutions to meet them.

Deploy: Our professional service organization, backed up with proven project management methodologies, can take you from design through deployment, commissioning, and training.

Support: We offer a complete SLA portfolio to keep your systems running and help plan for your long-term maintenance needs.

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