



FOX SPORTS scores world's most advanced broadcasting network

Problem: Network overwhelmed by demands of broadcasting

Solution: Meshed network design by ICT Networks utilising best technology from Juniper Networks

Challenge: Managing network rebuild in parallel with site relocation and a move away from the incumbent

Result: Robust, flexible network managing 50 terabytes of data a day with enterprise-grade security

GORE HILL, SYDNEY

FOX SPORTS Australia now boasts the most advanced digital broadcasting network in the world after deploying a Juniper-based solution from Sydney systems integrator ICT Networks.

CTO Michael Tomkins explains that a more diverse and expanded programming schedule meant data volumes were increasing at an unprecedented rate, demanding a radical rethink of the network architecture. At the same time, the growing threat to broadcast copyright posed by network security breaches had become of key concern to senior executives.

"Broadcasting has changed profoundly over the past few years to become all about digital, and we wanted a network able to do things that hadn't been done before," Tomkins says. The fact FOX SPORTS was in the process of relocating to larger premises in Sydney also meant it had the advantage of setting out with a completely clean slate.

After considering proposals put forward by its long-term incumbent, FOX SPORTS began a conversation with senior engineers at ICT Networks. Tomkins says he was immediately impressed at how quickly ICT grasped the complex nature of the challenge before him, as they put forward a proposal that was both imaginative and radical.

After careful consideration of the specific challenges facing FOX SPORTS, ICT designed an architecture based on the concept of a 'mesh-topology'. Tomkins recognised this would essentially remove the limitations of the previous 'tree' approach as there would be just one hop between any two points on the network, leading to much-improved efficiency and response.

ICT Networks and Juniper deploy robust, flexible and secure mesh-network solution for total business transformation

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- > "ICT was able to come back with business answers to business questions."
- > "Everything was fully integrated from the start,"
- > "With a virtual chassis we're now able to have a single pane of glass for everything
- > "With ICT, the engagement we got at the start is what made the difference – they really took time to listen and work out what we're doing."



Strong in support

ICT's ongoing monitoring, change management and quick response managed services has seen the FOX SPORTS network successfully managed throughout the critical first 12 months of deployment.

These services have been delivered by experienced Level 3 engineers equipped with sophisticated lab facilities, while FOX SPORTS has also opted to have an engineer onsite four hours a day.

"Having an actual ICT engineer onsite has really helped us to understand the network better," Tomkins says.

"We are constantly reviewing the model and looking at the network as a dynamic thing." "In many ways, we see ICT as our network chiropractor."

About ICT Networks

ICT Networks is Australia's only network integrator specialising in the design, integration and operation of Juniper Networks' complete range of network, security and mobility solutions.

One of only a handful of 'Elite' Juniper partners in Australia, ICT supports the infrastructures of high profile enterprises, from Australia's leading sports broadcaster to one of the top online billing facilitators, while working to help innovative SMBs realise their potential.

www.ictnetworks.com.au



This mesh topology was made possible by Juniper Networks' QFabric network and datacentre configuration. FOX SPORTS Australia is now the first broadcaster in the world to deploy QFabric. QFabric was a critical factor in Fox's decision to choose ICT Networks as the broadcaster assessed the best way to handle the more-than 50 terabytes of data it now generates every day.

"We have successfully achieved a full business transformation," Tomkins says. Given FOX SPORTS' business is predicated on a pay-per-view model and protecting copyright, watertight network security was a key part of the project.

"Basically we've been able to lock everything down on the network and Windows layer; everything was fully integrated from the start," Tomkins says. Giving him and FOX SPORTS added peace of mind, the project also involved partitioning the network for broadcast and corporate activities, with a firewall separating the two. "We now have an effective roles-based identity system." Much of the project's success came down to ICT's expertise with code.

"For the first time software is at a point where it can do everything," Tomkins says, adding that ICT's grasp of this reality helped FOX SPORTS build a network exploiting the full potential of SDN (software defined networking), SDS (software defined services) and SDDC (software defined datacentre).

"With a virtual chassis we're now able to have a single pane of glass for everything and achieve real-time reporting on everything happening in the building at any given time." It also means FOX SPORTS is able to scale for peak times without needing to build.

ICT was also able to work with FOX SPORTS to build an effective data analytics engine to better enable the broadcaster to identify and respond to viewer behavior. While Tomkins notes he was impressed by ICT's ability to understand and react to the complex technical challenges facing FOX SPORTS, the nature of the relationship the two companies were able to develop throughout the course of the project was a critical factor in its success.

"With ICT, the engagement we got at the start is what made the difference - they really took time to listen and work out what we're doing." ICT was able to come back with business answers to business questions." "Their depth of skill is unusual" -Michael Tomkins.