

Expanding Broadcast Network Creates New Opportunities

The Story of MediaHub

At a Glance

Company: MediaHub Australia

Location: New South Wales, Australia

Industry: Broadcast and data services

Challenge:

MediaHub needed to expand their broadcast network from 10G to 200G, while supporting a large number of video and data protocols.

Solution:

PacketLight's solution included the 200G DWDM Single Wavelength Muxponder, 20G OTN ADM Muxponder, and ROADM, to expand and build a resilient, low latency backbone that supports a variety of video and data protocols.

Success:

MediaHub successfully upgraded their transport network to 200G with a resilient DWDM infrastructure that supports video, data and storage protocols, with optional Layer-1 encryption. MediaHub is now able to grow its broadcast and streaming offerings, as well as provide data services to its customers.

Background

MediaHub Australia is a multi-service technology company, specialising in broadcast, data management and connectivity. Currently the largest broadcast playout centre in the southern hemisphere, MediaHub is now venturing as a technology services supplier into other industries

MediaHub initially catered to the broadcast needs of the Australian Broadcasting Corporation (ABC) and the WIN Television Network (WIN), but has since evolved into providing cloud-based services to multiple clients in the Broadcast Industry. The company now broadcasts over 400 terrestrial TV channels, and offers playout TV, connectivity services, storage services, online streaming and radio services to audiences locally, nationally and internationally.

The Challenge

MediaHub had to expand an existing 10G backbone to a 200G high-speed network in the greater Sydney area to support its broadcasting, streaming, and online viewers both locally and internationally.

The backbone needed to be low latency, resilient, and support protocols transmitting native and TSolP video, and Ethernet for data services.

The Solution

MediaHub required a comprehensive upgrade to its existing DWDM transport network, leveraging a number of PacketLight's carrier-grade solutions: PL-2000M 200G Single Wavelength Muxponder, PL-2000 20G OTN ADM DWDM Muxponder, and the PL-1000RO ROADM.

MediaHub had a 10G DWDM OTN ROADM network and expanded to a 200G DWDM OTN next generation network by multiplexing additional 200G wavelengths. The network also expanded into mesh topology, connecting additional sites and data centres over DWDM ROADM infrastructure.

The 200G OTN backbone supports any mix of client services - GbE/10/40/100G Ethernet, 1/2/4/8/16/32G FC, OTU2/OTU3/OTU4, SD/HD/3G-SDI and ASI services.

In addition, PacketLight's solutions offer embedded Layer-1 optical encryption, which is FIPS 140-2 Level 2 certified, and provides

GCM-AES-256 bit encryption and key exchange based on the Diffie-Hellman (DH) protocol without compromising performance, with full throughput and traffic transparency, and no latency.

PacketLight DWDM OTN carrier grade backbone is resilient, and offers full redundancy and protection.

Success

PacketLight's DWDM OTN solutions facilitated a resilient, high capacity, and low latency backbone enabling MediaHub to expand its traditional broadcast services, extend data centre interconnect offering, and remain a leader in its respective markets.

"PacketLight has (as usual) provided MediaHub with amazing support to deliver this large expansion project in a really tight timescale.

PacketLight products work flawlessly, and have enabled MediaHub Australia to provide Carrier grade services to our clientel."

- Alan Sweeney MediaHub Australia CEO

