

# CASE STUDY

## High density, modular satellite downlink & ASI to IP solution



Industry: Broadcast



### AT A GLANCE

**CLIENT:** Encompass Digital Media

**LOCATION:** London

### CHALLENGES

- Modular solution needed to downlink numerous satellite channels from L-band or ASI format then turn them into multicast IP TS for onward delivery
- Cost effective
- No down time

### SOLUTION

- WISI Tangram



"We're pleased with the level of help and product expertise from Zest Technologies. Implementation and installation went smoothly and quickly. Lead time was good and the WISI Tangram digital video platform did the job for us absolutely as expected."

**Colin Pauling**  
Solutions Architect



### BACKGROUND

**Encompass Digital Media** is a managed services company focused on supporting broadcasters (television and radio), cable networks, sports leagues and OTT platforms. They design, implement and operate reliable video and radio solutions that capture, process and deliver their clients' content from any source, in any format, to any destination in the most efficient manner possible.

Encompass needed to downlink numerous satellite channels from either L-band or ASI format and turn them into multicast IP TS for onward delivery. The Zest team came on board to help architect the solution.



### CHALLENGES

Encompass wanted a cost-effective, modular solution to allow flexibility and help future-proof their needs. Rather than have individual IRD integrated receiver-decoders (IRDs) for each channel taking up lots of rack space, Encompass wanted to downlink multiple satellite DVB-S/S2 channels or ASI feeds to a single headend and convert them to IP TS – all with a high packing density suitable for both permanent services and occasional use.



### SOLUTION

The Zest team provided the reliable **WISI Tangram** high-density video platform to give Encompass the feature-rich, high-quality, modular solution they were after. Tangram can manage multiple satellites with multiple transponders — all from the same chassis. It has 6x module slots in its 19" 1RU rackmount chassis, together with backplane, fan tray and integrated GigE switch and redundant power supplies.

DVB-Gateway modules can handle a maximum of 96 x DVB S/S2 channels in a single 1RU chassis. In addition, its integrated GigE ethernet switch enables service mapping and creation of TS presented to internal and external VLANs.

Encompass chose to have an array of modules all in the same unit, including DVB-Gateway, Descrambler/CI, ASI-IP, and IP processing modules. With the ability to add cards in a hot-swappable environment, we were able to ensure there was no down-time (especially important if you use the Tangram for multiple end clients). The solution used an N+1 redundant architecture.

Another benefit of the Tangram is that, due to the high density of channels per unit, less hardware is needed. This means lower power consumption, resulting in lower running costs — a win for both the environment and the budget.

The Encompass solutions architect set up the system, and after giving their MCR manager and support team a short training session, they were ready to go.