You can have your OTT & IP it, too.

Peter Blatchford

Sales and marketing director, Starfish Technologies.

> "You no longer need to build a Tower of Babylon to get content on air."

It has taken a long time, for a variety of reasons, but the rising tide of pushing mainstream content over IP is now commonplace.

Looking back a few years, some manufacturers, who were early to recognise the advantages, were keen to implement IP based interconnectivity, even though some of their customers remained, and are still, somewhat reluctant to implement IP-based infrastructures. That's understandable as, in the early days, there were still some unanswered questions in terms of reliability and interoperability. The good news, the very good news, is that those concerns have be addressed and systems have been implemented and proven.

Decisions on full implementation aside, the technology is ready, reliable, and available, so if anybody does want to jump in they can be certain that the technology works and it can integrate efficiently. You can mix and match technologies from multiple manufacturers, an issue that had given many potential adopters trepidations in the past.

When it comes to moving 'uncompressed' video over IP, I reckon AIMS, the Alliance for IP Media Solutions, just about has it covered. However, moving compressed video is different. There are several groups discussing and promoting standards, which, frankly, isn't helping all that much at the moment. But, let's be honest, that's the way progress in our industry has usually transpired. Factions emerge, then split, wagons get circled, and everything becomes more difficult than it has to be for a year or so. Eventually, a certain point of view or proven technology wins out and everyone moves forward until the next issue arrives, which it has historically done with a fairly predictable degree of regularity.

Building infrastructure video systems that operate over IP is relatively, inexpensive, and doable - right now. And there has never been a greater demand for content, or a better time to create it to feed the multi-platform masses with OTT delivery.

With respect to the products within these systems, ironically, the benefits of software-based architectures are still associated with hardware. What I mean by that is that hardware - but a lot less of it - enables a broadcaster or playout facility to build a system based on generic IT hardware and run any number of software-based applications on that similar hardware, and that has massive benefits in terms of reliability, flexibility, and cost. Around these products you can install an IP-based infrastructure and all but eliminate the need for clunky hardware that required a huge amount of expertise and an equal amount of racks and cabling. Starfish has, in the past, built systems exactly like that that ended up being works of art, which is just as well as they could now be consigned to a museum.

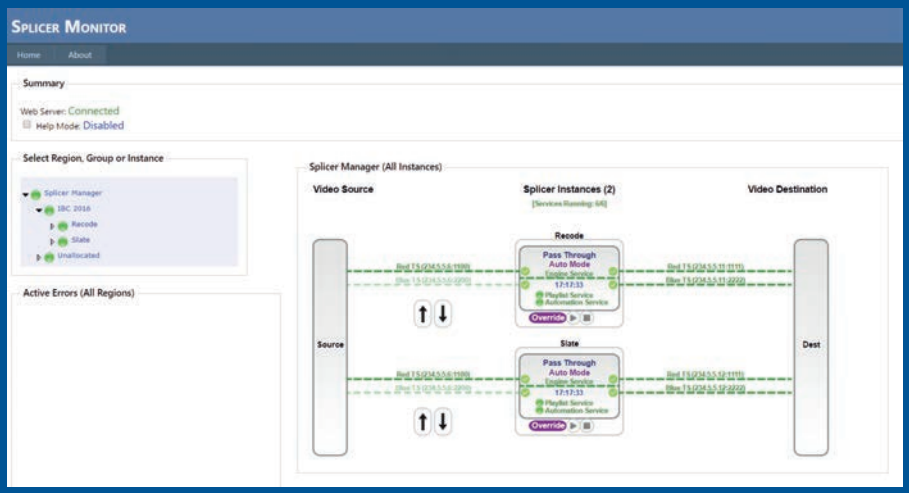
What I'm saying is, you no longer need to build a Tower of Babylon to get content on air with an IP infrastructure.

As a side note, we're increasingly being asked to supply IT hardware as well as our TS Splicer and other transport stream processing software. This makes a lot of sense for both parties, and we tend to favour HP servers for

one very good reason: The after sales support is outstanding - and it's worldwide. For Starfish, and our customers, that's huge. It means we can offer our products globally knowing that our customers can always get very good local hardware support.

Software based solutions are a great leveller. Whereas customers used to be influenced when making purchasing decisions based on a supplier's ability to provide global support, that differentiator has totally evaporated in a software world because the IT hardware support industry is vast, global, and highly experienced, which takes all the pressure off those who previously had to purchase or contract such support services. Super critical to all of this, though, is that we also establish a support contract on our customer's behalf by an office local to them. This adds another layer of comfort for those who may still have concerns about building and maintaining ad insertion and regional TV systems in remote or unmanned locations.

If we are supplying the IT hardware, we like to have the opportunity to pre-configure our software to each customer's exact specifications, and it saves the customer - in an ever-uncertain economic climate - from having to raise multiple POs and organise multiple approvals of those POs. We configure everything, ship it, organise local support, and only one PO has to be raised. That can make things



significantly easier for procurement, and budgeting departments, too.

Because our technology runs on a software-based architecture, we're not stuck with a rigid set of specifications, which means we can configure our product very flexibly. That in turn makes its integration into an existing system - or systems - far less complex.

By contrast, larger suppliers tend of offer "a product" that requires the local system to be configured, or built, around their specification it. In short, there is inherently less flexibility, but what we offer is just the opposite.

A perfect example of this is the technology we've developed for clean transport stream switching and content replacement, TS Switch.

Everyone at the delivery end works with compressed video signals, and switching compressed video is very much more complex than working with uncompressed video. TS Switch's ability to cleanly and transparently switch compressed video streams is critical.

In the past, doing this with compressed video was very difficult, and artefacts were almost unavoidable. What we offer as a technology provider is the ability to switch compressed video in a way that is transparent. Artefacts need not apply.

Now that the technical issues with IP-based infrastructure and delivery of OTT content are all but resolved, and now that customers have tried and tested technical solutions, they have become far more confident to build and deploy systems that can readily reap all the benefits that I've outlined above.

The IP and OTT movement has been bubbling to the surface for a number of years, but it has finally come to a boil and, like the advent of the steam engine, it will usher in a whole new era of technical, commercial, and - if handled properly - prosperity in broadcasting.

Moreover, IP and OTT will never require the big iron, rigid tracks, or grimy soot so often associated with broadcast engine rooms of yore.

You can now have your OTT and IP it, too.