AUDIO & CONTROL OVER IP
WITH
STAGETEC & DELEC ROUTERS
INTRODUCTION

There has been several attempts in the past by a variety of audio manufacturers to create an audio over IP standard. To date, none of these ‘standards’ have seen widespread adoption within the broadcast industry.

The vision within the Mediagroup has always been that any standard which we implement within our NEXUS audio routers and DELEC Intercom routers, need to fulfill the same stringent criteria we impose upon our own protocols - designed for use within Broadcast and other real time live production environments.

Embracing a packet switched audio network standard, fundamental principals must be adhered to. These include:

- Inherit low latency as well as the ability to control latency on the devices
- Layer 3 and Layer 2 standards
- VLAN capable
- Multicasting and Unicast capable
- Time stamping of packets with IEEE standards
- Redundancy
- Multiple sample rate capability
- Plug and play
- AVB Compliant
- Ability to embed control

Last but not least, in order to have widespread adoption, the standard needs to be manufacturer independent.

STAGETEC & DELEC IMPLEMENTATION

In 2010 Stagetec & DELEC partnered with the Australian company Audinate to implement their Dante™ audio over IP solution within the NEXUS Audio & ORATIS Intercom routing platforms. Dante™ was chosen because it met virtually all of our criteria for a protocol.

Aside from the technical specifications, Audinate is not an audio manufacturer, instead they are a platform provider, with upgradeability to any AVB standards yet to be ratified and actively participating in creating the standard.

For further details on the Dante™ protocol and platform, please visit their website at:
www.audinate.com

WHAT ABOUT A.V.B.?

Once the AVB standard is fully implemented and supported by the major IP switch and router manufacturers, the STAGETEC and DELEC Dante™ cards will offer a seamless migration path by means of a firmware upgrade to convert from the specific Dante™ protocol to an AVB ratified protocol.

The on-board network switches which have been used on both the NEXUS and ORATIS cards have already been fitted with AVB compliant versions. These actions will ensure your investment is future proof.

IMAGINE EMBEDDED CONTROL WITH AUDIO

STAGETEC and DELEC are co-founding members of the OCA (Open Control Architecture) Alliance defining a truly plug and play, cross-vendor control protocol which can be used as a standalone protocol or be multiplexed over the Dante™/AVB interface cards.

Once finalized, this protocol will allow a product from manufacturer X to be connected on a network with a product from manufacturer Y and provide seamless multi-channel audio and bi-directional control of the connected systems over the one cable.

It will also facilitate the integration of 3rd party integration companies by providing them a single protocol to control monitor products from different vendors.

For more detailed information on the OCA Alliance please visit our website at:
www.oca-alliance.com