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Yea Networks' Elemental Decision

Axia surfaces, PowerStation engines simplify an expansion project

USERREPORT

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DALLAS — Our project began with a conversation about replacing a 12-year-old digital console. I had some basic requirements for the console, and wanted to expand the agility of our audio systems. It evolved from there.

At the heart of this Yea Network operation was a large 26-input console in our main control room. We wanted to add a second room for redundancy as well as a room for a show, "Country Music Night," that was renting our space.

The need for a second studio was evident once we began to produce the Dallas version of "Dish Nation TV." This is a nightly, Fox-syndicated Hollywood entertainment show. After production began, we realized that we needed a second room to split off the radio show while TV segments were being taped in the larger talk studio.

I also wanted to have some sort of audio routing for our plant. I needed to create multiple submixes of the show for archiving and repurpose recording, as well as submixes and iso feeds to the six audio channels feeding TV production in Los Angeles.

I began to lay out the system on paper, which provided me an I/O count in different rooms: talk studio, control room, TOC and production. Once I had that, it was time to choose the system.

DECISION

I looked at them all and we decided on the Axia Element console system.

At the heart of the Axia Element system is a PowerStation console engine. The



PowerStation provides audio I/O, GPIO and network connectivity for each studio. In the event of a main switch failure, both rooms can operate independently using audio ties for emergency use, since the PowerStations contain their own network switch.

We purchased dual PowerStations — Axia designates them as main and aux. Together these units provide four mic ins, eight stereo analog ins, two AES ins, plus six stereo line outs and two AES outs. These outs can be used for program feeds, cue, headphone amps and monitors.

Inside, the software interface for the PowerStation's I/O can be totally configured, assigning devices and names and level settings. The dual PowerStation configuration provides dual power sourcing for each unit via its interconnect cable.

Also, on the Web-based interface used to configure the Power Station, any number of source profiles can be created to specify what sources are available on what faders, as well as allowing a GPIO to be associated

with every source, so no matter which fader is used, the logic is associated with the correct source. As part of this capability, mics can come up on any fader and correctly mute the studio or control room monitors.

Another great feature is that once a source is on the audio network, it can be pulled up anywhere else on the Axia network. I have sources on the talk studio PowerStation that are actually brought up and mixed in the control room. I now have 96 pairs of empty audio multipairs.

TOC audio sources were put onto the network via new Axia xNode interfaces. Their half-rack footprint makes them easy to put in tight locations, throw them on a book shelf or wall-mount them in TOC. We went with the rack-mount kits and have two units side-by-side in the TOC racks. Their connection to the audio network was a homerun to the PowerStations in each control room. If the Cisco 2960 switch fails, I'm still on the air.

We took things a step further by using

Axia switches and button panels to create an intercom system. Using Axia's optional Pathfinder server software, we are able to control the audio routing from button panels at user mic positions as well as external locations like production and screener positions. The push of a button at a user position routes the mic to the right channel of the headphone destination and mutes the mic to the console.

As an example of this, we have a button on the control room console that is designated "mics off." Pushing this button provides a signal to Pathfinder and it issues a series of module-off commands to the Axia Element surface to turn off the host mics.

While many folks won't need this level of capability, the back-end flexibility of Pathfinder eliminated multiple relay interfaces on the TOC wall and under the old console.

Pathfinder can also monitor sessions on the console and provided automated routing to destinations, depending on what mode the console is in. For instance, the submix provided to the TV production team needed one mic-isolated mix while on air, and another when the show is in offline recording mode.

For multiple mixes, when you look at the Element surface, at first you see only four program assigns. Don't let that fool you. Your mix-minus capabilities are virtually limitless. As sources are assigned to the console, you can designate it as a codec. A mix-minus is created for each of those codec sources or phone hybrids.

Also, there are software Vmixes (virtual mixers) that can be created in the PowerStation to combine source feeds into a new submix.

Once you get things rolling, you will see

the power in the Axia Livewire IP network, made possible by the Livewire connection on many audio devices. Phone systems, external processing or ISDN codecs from a number of manufacturers are simply connected to the audio network and appear as sources on the network. I have an Omnia 8x processor — its eight three-band Omnia processors combined into one 2 RU chassis. Only one RJ-45 connector is needed for the eight stereo ins/outs for the unit. All are available to the Livewire network.

We found that the Axia Element systems can be simple or as complex as we need. We started simple and slowly began to add features once we saw what it could do. Frequently we say, "What if we ..." and Axia Element gets it done.

For information, contact Axia Audio in Ohio at (216) 241-7225 or visit www.axiaaudio.com.