

USER REPORT

WEGL Dumps Analog for Axia Livewire

For Auburn, New Telos Subsidiary Enables One Ethernet Cable to Carry Audio, Data

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AUBURN, Ala. WEGL(FM) is Auburn University's student-operated, student-funded and student-managed radio station. Operating in the heart of the school, WEGL is a 3,000-watt Class A, non-commercial radio station at 91.1 MHz that has been broadcasting since 1971. We are unique in that we're able to put many musical tastes into our programming with our diverse staff, and we have an objective of breaking new artists first before MTV or other commercial radio stations.

Our old audio consoles were outdated and needed repairs, and some necessary replacement parts were no longer available for our existing consoles. So we started looking for an alternative.

We stumbled across this great new technology for audio routing, mixing and wiring — Axia Livewire, which enables an Ethernet cable to carry real-time uncompressed digital audio, device control messages and program associated data. A facility can be wired in a matter of hours, not weeks.

After several phone calls and lots of question asking, we decided to go with it. Persuading Auburn University to go with Axia posed no problem, as WEGL encourages a learning atmosphere both on the air and with our equipment.

We built a new control room out of one of

our old production rooms, which allowed us to remain on the air while we installed, tested and trained our staff on our new equipment. WEGL is using an Axia SmartSurface, a control surface/mixing board that gives you personalized control and provides an interface for the studio mix engine, which also is in use, along with a GPIO node and two analog line nodes in our control room.

We're also using two more analog line nodes to incorporate our existing analog mixing consoles and production rooms into our Axia system, and there's an analog line node in the engineering closet that feeds the STL and streaming computer.

The equipment was out of the box and on the air in a matter of hours, for the installation could not have gone smoother. I had the Cat-6 network cables already run when the equipment arrived. All we did was rack the equipment, plug in the power, connect audio I/O and connect it to the network. After less than two hours of configuration via Web browser, our Axia system was ready to go. The engineering staff, consisting mostly of me, is thankful for the negligible amount of wiring involved.

I can't stress this point enough: wiring an Axia system involves short runs of cable. You install the Axia nodes close to where your equipment is anyway. Besides the mic and speaker cables, I think the longest audio cable we have now is 3-1/2 feet. This equipment placement and cabling is certainly preferable to conventional wiring techniques.

Our operators enjoy the capabilities and flexibility that the Axia system provides. As with any new equipment, there were some training issues. But other than general operational questions, there have been no major

problems. In fact, considering the staff has been accustomed to rotary-pot analog consoles, I'd say they became comfortable with the SmartSurface quickly.

Traffic jam

One problem for us was a multicasting traffic issue with Auburn University's existing computer network. The Axia system multicasts ARP packets over the network, which was problematic when we connected our working Axia system to the rest of the university network. However, there was a simple solution.

It turns out the Layer 3 routing capabilities need to be used by the HP Procurve 2626 switch in order to keep the multicast traffic off Auburn's network. As this issue was resolved, it became easy to connect our Livewire to the rest of the campus network, enabling convenient yet secure VPN access into our Livewire network and Axia equipment for configuration changes. The connectivity also enables the convenience of having one network in the radio station for Internet access, file transfers and e-mail — all of which co-exist with the Livewire audio.

Within the next year or two, WEGL plans on replacing our analog consoles in the Production rooms with more Axia gear. However, we won't need much equipment. Axia lets you connect audio sources much like connecting computers to a network. It's completely different than conventional wiring, and even from other routing systems because it uses standard, off-the-shelf Ethernet switches to route and distribute audio, closures and regular computer data.

For more information, including pricing, contact Axia in Cleveland at (216) 241-7225 or visit www.axiaaudio.com.