Case Study

Broadcasting Studio

Project: Set up a multi-user video extension and matrix switching system that operates over a LAN.

The challenge

A major network broadcasting studio in Chicago wanted to set up a video extension and peripheral matrix switching system over its existing Ethernet network. The system needed to enable forty producers, directors, studio technicians, and operators to gain access to more than sixty computers, servers, video sources, and camera feeds from any desk location.

A competitor’s system that had been deployed caused daily problems, including delayed switching times, lack of simultaneous access for multiple users, limited device support for USB peripherals, uneven video and audio quality, and unreliable system durability. Additionally, it used an older infrastructure that needed to be updated.

The solution

The Chief Hardware Engineer of the studio came to Black Box because he had worked with us on another project for digital signage. He wanted an entire switching and extension solution suite that included a management interface for easy migration and maintenance. The studio is responsible for producing live broadcasts, and the list of issues that needed to be addressed was long. The system needed to be as free of glitches as possible, and extremely reliable and flexible. The current system and its faults left end users frustrated and had IT support dealing with endless trouble tickets. Plus, technical support had to be available 24/7 all the way through the process (pre- and post-sale).

The solution decided upon was the ServSwitch™ Agility Extender platform, which is a system of single-head and dual-head transmitters and receivers that extend DVI, USB, and audio over the local area network (LAN). Since time was of the essence, the Black Box team of product engineers, application engineers, sales specialists, and product managers worked together to review the application and its challenges. Demo equipment was configured at Black Box and shipped to the studio, where the Chief Hardware Engineer was able to install the setup with minimal online and phone support help from our engineering specialists. Agility transmitters were installed at each server, computer, video source, and camera feed; receivers were connected to each user station. A single point of management and control, the Agility iPATH™ controller, was installed in the server room and deployed over the existing network.

Because this HD video and peripheral matrix switching system is incredibly flexible and scalable, the engineer is able to continue to expand his broadcast configuration, adding equipment and users as required. The Chief Hardware Engineer stays in contact with the engineers from Black Box, and often inquires about feature sets he would like to see on our products. Black Box product development and support teams also continually release updated firmware to fulfill this client’s needs.