BLACK BOX

CASE STUDY:

WWE Enhances Production Efficiency with High Performance KVM

BACKGROUND

World Wrestling Entertainment, Inc. (WWE) is one of the largest sports entertainment organizations on the planet, broadcasting more than 500 events a year to about 36 million viewers around the world. They produce a monthly average of 400 program hours from their Stamford, Conn., campus, including 35 of domestic programming, 13 of home video, 264 of localizing shows for a wide range of international markets, 99 of network material, and 29 of OTT product.

The Stamford facility delivers significant content with the help of its 76,000-square-foot space. The production is spread over two buildings, five modular buildings/trailers, and three leased areas on adjacent properties. There are also nine data centers spread across three of the buildings, with more than a mile of dark fiber connecting the sites.

PROBLEM

In 2016, WWE considered a new KVM system that could accommodate their production load. The facility was limited to 64 ports with unreliable line ties that often caused system breakdowns. The analog VGA system also did not travel long distances well, and suffered from low video quality and limited overall resolution. The production team's graphics system was also on a separate matrix, making it difficult to get from one system to another.

The WWE required a setup that would enable control-room producers to seamlessly use multiple screens at high resolutions. The company also wanted a clean, easy user-management system and the flexibility to add both engineering and operator systems.

Black Box expressed interest in the upgrade and was chosen among three possible vendors due to their pre-sales plan and strong support record.

"From the start, Black Box helped us put together a good list for what would be needed for each station," said WWE Director of Broadcast Engineering Jasper Veldhuis. "They put together a configuration template with the different extenders and connections that we would need for each device and were even able to help us with some of the design."

Following the initial agreement, the WWE also asked Black Box to support their need for an additional control room.

CLIENT:
WWE

INDUSTRY:
MEDIA & ENTERTAINMENT

REGION:
NORTH AMERICA

WEBSITE:
WWE.COM

SOLUTION:
DKM 288 PORT MATRIX

SOLUTION

Black Box was able to surpass the customer's expectations thanks to their broad product lines. "With Black Box, you can basically get anything you need," Veldhuis said. "They possessed flexibility that assured us we could get what we needed now as well as be positioned to get other equipment if we need it later. Then there was the wiring. We wired most of the matrix with their cables and connectors, and it was nice to order it from one vendor."

Black Box's eight-in-one solution, which connects eight screens and requires just one box to plug into the matrix, was also a deciding factor. Explained Veldhuis, "We knew it would allow producers to do things so much faster rather than jump from computer to computer."

This was certainly a large project for Black Box. It encompassed 130 non-linear editing systems, 27 graphic production workstations, three linear editing and control room suites, five audio production rooms with four voice-over booths, a music composer's room, one virtual studio, and a hard set.

In a three-month buildout, Black Box revamped the WWE's system by installing a 288-port switch populated with 246 TXs and RXs. They also installed a 48-port switch populated with 36 TXs and RXs, which was used for their extra control room. The overall system was designed to allow the WWE to upgrade to a 576-port switch if needed. Black Box Cat 6 cabling and connectors were also used, delivering a product continuity that appealed to the customer.

OUTCOME

Since implementation was completed in October 2016, Veldhuis has been very pleased with how the new system has enhanced efficiency for the WWE's production team.

"The system has made the most improvement in our workflow within our production control rooms," he said. "It has enabled extreme flexibility for production to work where they want. If someone from production wants graphics in the back row or the front row, both are possible. If they want graphics in another room, that's also possible. He added, "The quality of the video, and zero latency for video and control, is equal to connecting directly to the computer. This allows access to all systems in a transparent way for users. Having access to hundreds of computers from one user station with multiple displays is life changing."

A "central ingest" is another huge advantage the new system offers. Black Box purpose-built a GFX KVM to provide this key component. "Users can access both AVID and EVS with one mouse and keyboard," Veldhuis said. "They can seamlessly work on both systems to ingest files and live feeds. This development makes sharing resources far easier, which provides a cost savings as less equipment must be purchased to accomplish the WWE's production needs."

Veldhuis wouldn't hesitate to use Black Box again or recommend them to other companies. "They helped us throughout the process and went out of their way to make sure any difficulties we faced were overcome," he said.