InMEDIA

IHSE Draco KVM-Matrix Switches Support Broadcast IT Workflow

Computer-based files and editing software are becoming more and more prevalent in the broadcast industry, and with them comes the problems of file management and computer access…

Where extremely large files must be made accessible and shared amongst computers that may be physically remote from the terminals that are used to operate them, a proven and robust solution that is rapidly gaining popularity in TV and film studios, post-production and editing houses is the KVM-matrix switch.

This is a device that operates on computer data in a similar manner to the video matrix that connects broadcast video sources to displays and transmission equipment. A KVM matrix switch allows computers to be located wherever is most convenient and can dynamically select and connect any of them to a specific keyboard, video screen and mouse over a Cat X or fibre connection, as well as providing bidirectional USB2.0 data transfer and HID connection. Comprehensive control and management tools enable single and shared connection to be made and by using stored configurations, quick and easy device interconnection can be made to suit any operating environment.

The Draco tera is the latest generation of KVM switches from IHSE and operates with data rates up to 3Gbps, delivering artefact-free, full motion video at HD resolution. Support for single, dual and quad-head devices means that today's current HD, 4K and 3D technologies are accommodated with capacity to include future formats. It is available in chassis sizes from eight ports to 288 ports with plug-in I/O modules allowing any configuration of inputs and outputs, suitable for the smallest studio or SNG van, up to the largest broadcast organisation or OB truck. Very large installations above 288 ports can, and have been, achieved using cascading of devices.

A further feature offered by the Draco tera is the ability to handle true video formats. So, for example the HD-SDI video stream from Final Cut Pro can be switched at the same time as the editing desktop to the user's terminal. This is achieved by controlling the HD-SDI signal though the switch, without having to install parallel data and video switching networks.

The versatility and flexibility of the Draco range of KVM switches make it an essential tool in today's broadcast world, for a host of different applications:

OB Vehicles

Facility House Broadcast Partners, the Netherland's newest full-service facility management company for the television industry uses a Draco KVM-matrix switch to route and manage PC-based, graphics, video, and data content to several workstation terminals in the vision and audio mixing areas of their latest outside broadcast vehicle. IHSE's Draco KVM-matrix switch populated with 32 input ports and 16 output ports supports full HD content up to 1920 x 1200 DVI-D resolution over the CatX cabling installed in the vehicle.

Post-Production

Shapeshifter Post offers custom-tailored edit solutions and workflows for commercial, promotional, feature film, television show and live events. Shapeshifter installed an IHSE Draco switch when the company needed a robust solution that could support all input devices without issue; including Avid Symphony, DS, and Media Composer, De Vinci Resolve, and

IHSE Draco KVM-matrix switches are capable of switching PC signals and HD Video allowing editing workstations to instantly switch to any desired application

Final Cut Pro workstations. An editor may work in one bay for picture editing to quickly move to another to add in special effects. An entire production house's resource is instantly accessible at every workstation.

National Broadcaster

NDR, Norddeutscher Rundfunk, Germany's northern TV and radio broadcaster delivers four TV channels from four studio complexes in Hamburg. Similar set-ups in all four studios comprising dedicated Draco KVM-matrix switches enable up to 16 source computers to be connected to 32 user terminals in each studio, providing full access to digital content up to full HD resolution content with no latency, using single-link DVI connectivity over CatX cable. At each user station the user has a terminal with keyboard, mouse and video connection and USB interface. In addition, serial RS232 connectivity allows touchscreen monitors to be used to control individual PCs.

Stored selections allow the terminals in any studio to be quickly configured to a particular presenter's requirements to suit the specific programme being transmitted, making them universal in use. Personalised settings and configuration enable each presenter to arrange data and control applications, such as information, email, traffic webcams and internet access onto the screens to their own personal preference, making it easier for them to access information quickly whilst on air.

Hollywood Sound Studio

Skywalker Sound is one of the largest, most versatile full-service post-production facilities in the world, with approximately 100 audio workstations. On a typical day, up to six people are working on each Dub Stage using an IHSE Draco KVM-matrix switch to access any of the 48 systems that reside in one central machine room. Editors and mixing engineers can easily switch between multiple workstations from their location on the stage.

This Draco installation is a recent replacement of a previous eight year old analogue system. The new IHSE Draco system provides a much higher resolution and higher picture quality to the artists using the system than the previous one. The Draco solution also allows content to be delivered to HD projectors for immediate access. At a moment's notice Skywalker can display content or tools on anything connected to the HD-KVM Matrix.

Keyboards, monitors, touchscreens, mice and USB devices are instantly connected to any computer

IHSE Draco KVM-matrix switches use Flex-Port technology to connect any port to an input or output device