# Lagardère's new Broadcast Centre
## Draco tera KVM solution streamlines the virtualised broadcast workflow

## The Customer

Lagardère is a major French media conglomerate with interests in multi-media content creation and distribution throughout the world. The company's broadcasting activities in France span radio, TV and audiovisual operations. Operating from offices in central Paris, the broadcast division is amongst the top three transmission organisations in France.

Lagardère's broadcast division relocated to a new office complex in 2018 and the decision was taken at that time to completely re-equip the facility; to bring it up to date with modern broadcast workflow procedures and take advantage of the latest technology, including deployment of new IP-based broadcast systems.

## The Challenge

The overriding objective was to ensure that the new facility would meet the expanding demands of modern-day broadcasting to multiple platforms and ensure that it would be able to keep abreast of developments in the future as the industry continues on its rapid evolutionary pace.

Lagardère designed a new studio complex based around six independent studios, each with their own portfolio of equipment - which was to be freely accessible by the staff running that studio. In addition, two general workstation areas were to be constructed outside the studio complex.

A wide range of real and virtual computer systems was included in the system. It was critical that operators should be able to reach any device simply, easily and without delay.

All equipment, for all studios, would be located in a central equipment room where it can be maintained and kept securely, whilst removing the need to situate noisy heat-generating, large items of equipment within the actual studios.

## The Solution

Based on previous experience with IHSE KVM matrix switches and extenders, Lagardère, in conjunction with Elecdan the local IHSE distributor and system integrator, developed a design concept that would fully meet the system requirements.

The design team realised that a comprehensive KVM system, formed from several Draco tera KVM switches, would be the best way to enable remote access from the studios to the equipment in racks in the central equipment room.

At that time, a major missing link was the ability of KVM switching systems to manage virtual machines over an in-house IP network and to enable operators in one studio to access broadcast devices associated with other studios, again over an IP network for simplicity of use, effectiveness and convenience.

Working together, IHSE and Lagardère created a solution using the new Draco vario Secure IP Gateway extenders. With some additional specialised development, a device was created that matched Lagardère's requirements. This enabled the system to interact with virtual machines in exactly the same manner as real, physical, devices.

A further requirement was the ability to distribute and view content of different types and resolution on all monitors throughout the KVM matrix network. The IHSE Draco switch can receive video streams of all common formats, including DisplayPort, DVI, HDMI and HD-SDI. In addition, it receives VGA signals from legacy equipment. All formats are handled within the Draco tera switch and output to any display device in the format appropriate to that display.
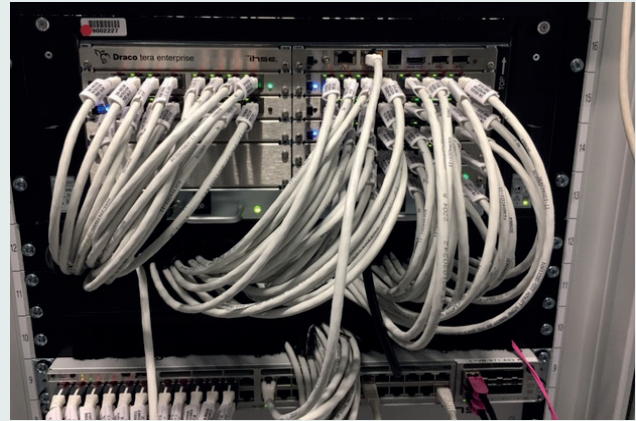
This cross-conversion was an important aspect as Lagardère, like most other broadcast facilities, operates a stock of old and new equipment of varying capability and ages that are critical to its operation. Therefore it was essential to be able to incorporate all devices into the new broadcast infrastructure. The equipment attached to the KVM switch system includes devices from EVS, Vizrt, Riedel, Zenon and Avid, amongst others.

## The Benefit

The result was an integrated workflow solution that used both real and virtual machines and appears to users as a single unified system. They do not need to understand the infrastructure in order to use it during their operations; saving time and complexity.

Sufficient redundancy and spare capacity have been incorporated into the design so that it can be expanded and modified in future as equipment is replaced and new features and facilities are added. The system fully met the primary objective of providing a system that performs well now and can be extended and evolve in the future.

Michael Allouche, Responsable Exploitation, summarised the project: "There are many advantages provided by the IHSE KVM matrix switch system. We have full virtual machine management, can ingest and distribute SDI video as well as high-definition digital audio and have full audio capability.



*A Draco tera enterprise KVM switch, part of a larger KVM system*



*Lagardère studio with multi-screen application served by Draco vario extenders*

> *The system provides simplicity of installation, rapid implementation and flexibility in use. It is possible to operate equipment using touch screens, to have large distances between the servers and the screens thanks to the optical fibre links. Operators use computers as though they were in close proximity, under their desks; whereas in actual fact they are many tens of metres away and housed in a highly secure and air-conditioned central equipment room where they can be managed and looked after properly and securely.*
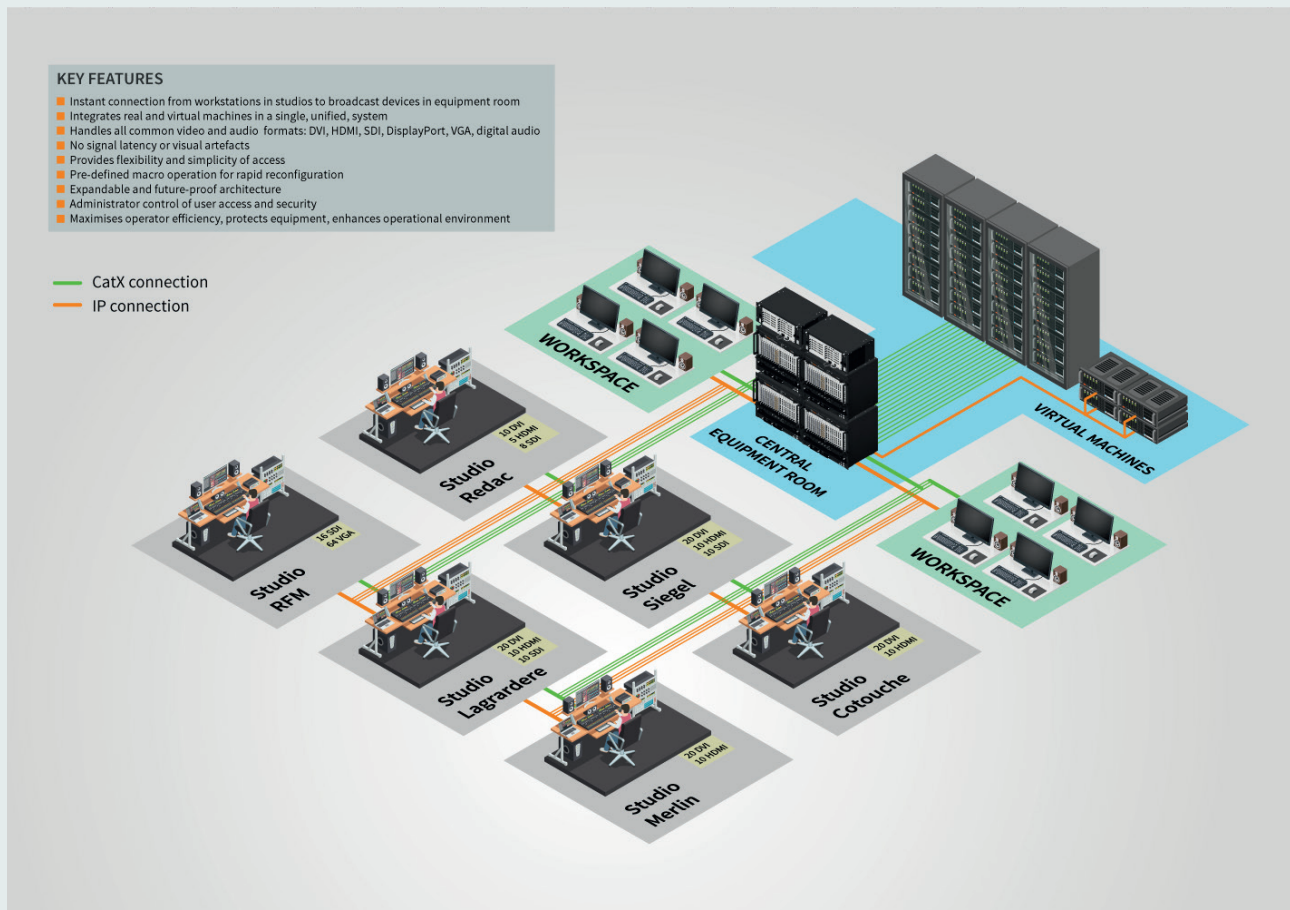
Michael Allouche, Responsable Exploitation, Lagardère

Christophe Varnier, system architect for Elecdan commented: "The broadcast world is evolving rapidly. New workflows and infrastructure are required that enable commercial and business objectives to be met by organisations.  They have to deliver the highest level of operational performance and effectiveness to the many staff involved in professional programme and content-making.

The IHSE Draco tera KVM system has proven itself over the years as a highly reliable and functional solution to remote computer access containing large numbers of devices.  It is particularly suited to broadcast workflows in which reliability, speed of switching and image quality are paramount.

> " *In this installation new IP gateway devices were developed in conjunction with Lagardère and IHSE to solve particular requirements that could not be achieved using standard products.*
>
> **Christophe Varnier**
> **System Architect, Elecdan**



**KEY FEATURES**
- Instant connection from workstations in studios to broadcast devices in equipment room
- Integrates real and virtual machines in a single, unified, system
- Handles all common video and audio  formats: DVI, HDMI, SDI, DisplayPort, VGA, digital audio
- No signal latency or visual artefacts
- Provides flexibility and simplicity of access
- Pre-defined macro operation for rapid reconfiguration
- Expandable and future-proof architecture
- Administrator control of user access and security
- Maximises operator efficiency, protects equipment, enhances operational environment

— CatX connection
— IP connection

WORKSPACE
CENTRAL EQUIPMENT ROOM
VIRTUAL MACHINES
WORKSPACE
Studio Redac
Studio RFM
Studio Siegel
Studio Lagrardere
Studio Cotouche
Studio Merlin

**KVM products in use**

› Draco tera enterprise matrix switches
› Draco tera Matrix Grid software
› Draco vario extenders (fiber and Cat X)
› Draco vario Secure IP Gateway extenders

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KVM & Beyond