



Digital KVM Extension and Switching in a German Airport Operations Center

- **Industry:** Airports
- **Client:** Operations Center
- **Region:** Germany
- **Solution:** KVM Matrix Switching
- **Product:** DKM

BACKGROUND

A large German airport operations center faced a challenging work environment because the airport was expanding its terminal and adding gates to accommodate the growing number of passengers. Technical support staff wanted to avoid heat and noise in the operations control room environment that was centralising monitoring access control, security camera surveillance, and general airport security.

THE CHALLENGE

In order to improve operators' efficiency, ensure a quiet work environment and, at the same time, make it easier for the IT staff to maintain and monitor servers running the system management applications, IT decided to backrack server infrastructure to a new central equipment room. Furthermore a video wall had to be connected to the servers in order to enable sharing visuals from different sources to all operators. The technical division decided to implement a matrix switching system that enabled extension and switching of multiple video and peripheral signal sources to different multi-screen operator desks. Furthermore the system had to support 24/7 operations, central management of user access rights, and both CATx and fiber cabling.

THE SOLUTION

Using the DKM FX HD Video and Peripheral Matrix Switching system enabled this organisation to backrack a mix of CATx and fiber transmitters in the data center and place receivers in the central operations control room (copper) and a second building that hosted a backup control room (using fiber). This fully digital DKM matrix switch solution offers switching, extension, and distribution of HD video signals, USB, and audio signals over copper or fiber (up to 4K resolutions) and enables multiple users to easily access any computer system.

The system has a focus on power redundancy, instantaneous switching of HD video signals, and is connected to a backup control room, that in case of a security violation can take over control within seconds. At the central equipment room, all individual systems are connected to a dedicated screen to ensure video is present at all times. Operators switch between active servers/applications by simply moving the mouse from one screen to another through the integrated Glide & Switch technology.

RESULTS

The DKM system is highly reliable and supports 24/7 operations. If the IT staff needs to further expand the operations center, new operator desks can be easily connected to the existing server infrastructure by simply adding new receivers to the matrix system. The operator workplace is now quieter, with less heat, more secure, and leads to improved functionality for operators as well as increased job satisfaction and productivity.