

Thales SkyCentre

The future of Air Traffic Management uses Draco tera KVM switching system

The Customer

Thales provides air traffic management equipment to the air industry. Two out of every three aircraft take off, reach their destination and land thanks to Thales' systems. The company is the worldwide leader with over 240 TopSky ATM solutions, 7,000 Nav aids, 600 radars, 1,600 ADS-B/MLAT stations, and over 16,000 controllers utilising Thales solutions. Thales is the number 1 industrial partner to SESAR, and is also involved in NextGen and ICAO Block upgrades.

As part of the research and development activities, Thales has established SkyCentre in Rungis, France. SkyCentre is a unique environment that has been specifically designed to reflect a real operational ATM setting. The role of SkyCentre is to enable ATM professionals to share and advance their best operational practices and to validate new concepts, including those coming from SESAR and NextGen and perform real time simulations in a realistic operational environment.

SkyCentre also operates as a showcase and demonstration facility for Thales ATM technology.

The Challenge

In order to provide the multi-role capability within SkyCentre, Thales needed to incorporate multiple ATM systems and combine and control them with an extensive KVM switching solution. One that could be pre-configured to instantly switch between computer-based systems to meet whichever role the SkyCentre was undertaking at that time.



SkyCentre - product showcase and demonstration centre



Innovative products are tested on a simulated cockpit

An important aspect of the system is that it must not affect the operation or performance of any of the equipment being used.

The Solution

IHSE specialist integrator, Elecdan, specified a solution for Thales to achieve their aims and requirements. A large Draco tera KVM matrix switch was installed within the SkyCentre to enable system administrators to instantly reconfigure all the in-house systems to suit individual tasks; whether for product demonstrations, research into operator behaviour in simulated environments or validation of new technologies or regulatory concepts on behalf of SESAR, or other standardisation bodies.

The Draco tera compact KVM switch enables instant switching of connections between the different ATM applications running on dedicated users and the many individual workstations and users terminals around the centre. Administrators can change the configuration of the system using simple keyboard commands or through a screen-based GUI to meet the requirements of the immediate task. Pre-stored configurations make it easy to return to previous setups and the simple connection mechanism enables new devices and systems to be easily added and arranged as needed.



The role of the Thales Sky Centre is to provide a centre dedicated to the ATM innovation. It allows to demonstrate all product configurations fitting to customer needs. It creates an environment that emulates real conditions with live demonstrations, enabling to create new concepts.

Jean Philippe Pinheiro, SkyCentre Manager

The Benefit

The SkyCentre benefits from the instant source switching, undelayed video and data transmission and artefact-free images capability of the Draco tera KVM switch. It allows the centre to operate efficiently and with a high level of adaptability whatever the task.



SkyCentre simulates a real ATM setting

A complete range of ATM solutions to experiment with

Innovation Lab

- More efficient HMI
- Breakthrough technologies
- Latest state-of-the-art human factors tools
- Safer green functions

Briefing Room

- Advanced technological capabilities for productive working sessions

Airport Environment

- Boost Airport Capacity Solution
- TopSky - Tower with DMAN function and ScanSim connection
- CDM Platform
- Landside connection

iDeck A350 Cockpit

- Real air-ground simulations
- Demonstrates Thales' unique capacity of ground and on-board interactions: i4D, D-Taxi, TopMet

En-Route & Approach Centre

- TopSky - ATC
- Global Surveillance, with real live data
- TopSky - AIM
- TopSky - Human Factors
- TopSky - ATFM
- VCCS

KVM products in use

- > Draco tera compact matrix switch
- > Draco ultra DP extenders
- > Draco ultra DL extenders

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