Omada Offers TV Skyline Reliable Data Transfers and Failure Safety for Live Broadcasting

Project Scope

Provide a comprehensive network switch solution for TV Skyline's Ü8 UHD broadcasting van.

Customer Profile

Name: TV Skyline
Industry: Commercial & Building
Location: Germany

Solutions

- SG6428X × 2
- SG3428 × 7
- SG3210 × 4
- SG3452 × 2
- SG3428MP × 1

TV Skyline offers broadcasting vans and specialized cameras for broadcasting stations. The Ü8 UHD broadcasting van is about 16.5 meters long and is equipped with 30 working stations with the latest technology. This setup requires a powerful solution capable of handling massive amounts of data from various live devices and video resources for transfer to the broadcasting stations.

Fast and Reliable Video Data Transfers

To meet the high demands of 30 HD streaming workstations, a high-bandwidth data transmission system is essential for a reliable video broadcast. The two primary L3 switches, SG6428X, are interconnected via a trunk connection, enhancing data throughput between switches without the need for additional cables. The inclusion of four 10 Gigabit SFP slots ensures the SG6428X switches deliver superior speed and reliability.

The interior of the Ü8 broadcasting van. Switches by Omada included. (Source: TV Skyline)

"Based on the pleasant cooperation with TP-Link before, we'd love to choose TP-Link as our partner in the Ü8 UHD network construction. We know that TP-Link is professional in this area and they also offer great technical support."

——TV Skyline

Physical Stacking for High Performance & Redundancy

All HD video data converges at a central station, requiring core switches to process and transfer massive data streams under high load without failure. With true physical stacking, the two SG6428X switches are linked under a single IP address, allowing them to function as one, simplifying management. If a switch crashes, the others continue operating, ensuring complete, uninterrupted data transmission across the network. This setup enhances scalability, streamlines management, increases redundancy for high-density deployments, and enables efficient network expansion for adaptability.

Full data coverage with two main switches.
(Source: TV Skyline)

VLANs for Diverse Group Management

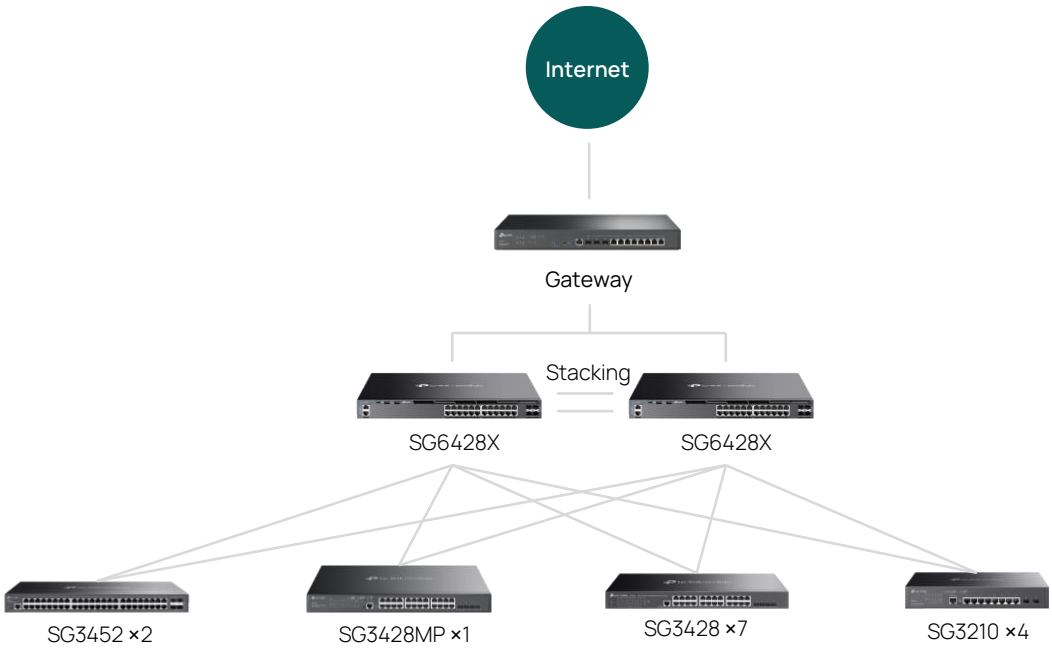
The 30 Ü8 workstations produce a high range of HD video resources for different channels and demands. Depending on the function demand, message streams must then be transmitted through different VLANs. Omada supplied a range of access layer switches, including 7× SG3428, 4× SG3210, 2× SG3452, and 1× SG3428MP.

Video data is transferred to the access layer switches and segmented into different VLANs. Each VLAN serves specific working groups and converges in two main switches. This data is then routed to guide the message stream within the network. Segmenting VLANs minimizes cross-group interference, enhancing network security.

SG3428 is used for devices within the picture and sound range, offering extensive Layer2 management functions. These L2 switches ensure high-performance networks for various working groups. Other L2 switches like SG3210/SG3452 feature multiple LAN ports for high-speed data transfer, along with comprehensive L2 management, enterprise-level QoS, and security protocols.

"TP-Link gave excellent technical support regarding the configuration of V-LANs and LACP, i.e. cable bundling. It is especially great that we have a personal contact person for all questions regarding the technology."

——Laurent Schiltz, Technical Manager at TV Skyline



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