



Enhancing CityChurch's AVoIP Setup and Worship Experiences

Overview

CityChurch BFP KdöR needed to ensure smooth data transmission over Ethernet using MA-Net, Dante, and other AVoIP protocols during Sunday worship services for its congregations in its Aachen church. Each week, before the services began, it had to set up the network installation, addressing issues like latency, audio dropouts, and long setup times. Seeking to enhance the worship experience and reduce the burden of setup, it turned to Zyxel Networks for a solution. Upon switching to Zyxel Networks' equipment, it found the new solution provided exactly what it needed—low latency, high switching capacity, and ease of use. With these improvements, Sunday services run smoothly, allowing the church to focus on what truly matters.

Challenges

Setting up the network every Sunday was a challenge due to the limitations of the previous equipment. The church services took place in a rented cinema, requiring a complete installation rebuild each week. This process was further complicated by latency issues, audio dropouts, and lengthy setup times. The complex configuration and slow response times further added to the frustration, highlighting the inefficiencies of the previous setup. These recurring issues underscored the need for a more efficient and reliable solution.

Solutions

Zyxel Networks' XGS2220 series L3 access switches, specifically designed for professional AVoIP applications, were deployed to ensure seamless audio and video data transmission. Traditional AV vendors and installers often struggle with IP-based networks, especially when setting up broadcasting systems, which can result in video streaming issues.

Customer

CityChurch BFP KdöR

Industry

Religious organizations

Location

Aachen, Germany

Customer Background

CityChurch Cologne, a Pentecostal church founded in 2015 by Lead Pastors Sarah and Dominique John, is part of the Bund Freikirchlicher Pfingstgemeinden KdöR. Its mission is to glorify Jesus by loving people, making a positive impact on its city, and spreading hope. The church is dedicated to building a community where individuals support and strengthen one another during challenging times.



We use AVoIP protocols to stream audio, video, and control data for our Sunday services, and it has to be in real-time with extremely low latency. After replacing our network equipment with Zyxel Networks' XGS2220-54/54HP switches, the latency issues were resolved. Now, we're thinking about upgrading to Zyxel Networks' new Networked AV switches."

David Mössner, Production Director
Campus Aachen

The XGS2220 series switch overcomes the challenges with its intuitive web interface and specialized Networked AV features, enabling users to easily monitor network status and manage settings. The Networked AV Mode, tailored for selected switch models, provides an instant overview of the network, simplifying AVoIP system setup.

In addition, the Zyxel Nebula cloud networking solution empowers users to manage connected devices remotely, eliminating the need for on-site visits and making it ideal for managing multiple locations. Nebula's cloud-based platform transforms network management by allowing devices to be pre-configured remotely, ensuring a true plug-and-play experience upon delivery. Its centralized management system streamlines setup and updates, drastically reducing the complexity and effort of on-site deployment and cutting deployment time in half.

Product List



- XGS2220-54/54HP L3 Access Switch



- NWA210AX WiFi 6 Access Point



- Nebula FWA710 Nebula 5G NR Outdoor Router

Results

Zyxel Networks' switch offers a straightforward and stable network solution. The customized setup feature focuses on the most essential AVoIP features, and the dedicated networked AV dashboard highlights key elements like ports, systems, and bandwidth, making operations as user-friendly as possible.

- Simplified AVoIP management with an intuitive interface and Networked AV Mode
- 25% latency improvement and enhanced network performance
- Centralized management reduces setup time and complexity for quicker deployment

