Huawei Joins Hands with Gelsenkirchen, Germany to Build a Smart Wi-Fi City

Challenges

» Urban modernization relies on intelligent management and orderly operation. Gelsenkirchen wanted to build a network connecting enterprises with research and education facilities throughout the city to lay a solid foundation for future smart city construction.
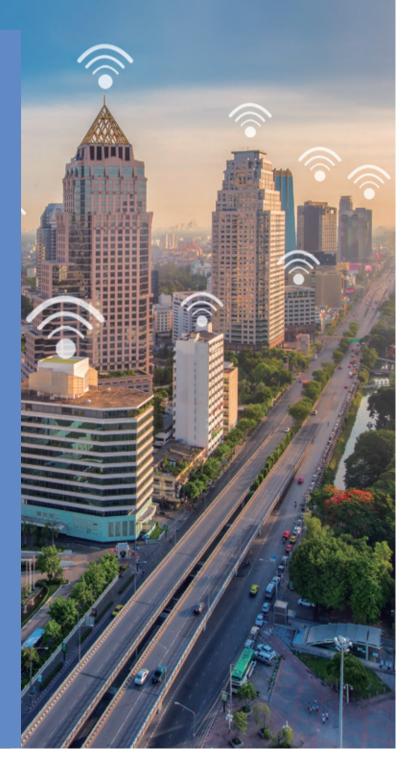
Solution

» Huawei offered complete urban network solutions covering data centers, routers, switches, and wireless APs, to allow interconnection between hospitals, schools, residential buildings, and public transportation.

Customer Benefits

» Commercial and pedestrian urban areas: More than 100 indoor and outdoor Wi-Fi hotspots now exist on the longest central commercial street (2 km) in Germany, bringing convenient Internet access to residents and visitors.

» Arena AufSchalke: A WLAN was installed to accommodate 61,500 spectators, allowing fans to interact online, purchase souvenirs, and order food at any time.

» Residential areas and schools: More than 700 residential areas, 86 schools, and 100 kindergartens now connect to the Internet through optical fibers, laying a foundation for digital teaching and Smart City construction.

Gelsenkirchen, Germany is situated in the North Rhine-Westphalia state located in Ruhr, one of the largest metropolitan regions in the Northern Hemisphere and Europe. The city is home to FC Schalke 04, a famous German football team.

Challenges

Gelsenkirchen's main concern was to build a Smart City network platform to cover the entire city and focus on improving city security, enhancing citizen quality of life, and offering future urban services by collaborating with local enterprises, municipal departments, and law enforcement agencies.

Solution

» Gelsenkirchen partnered with Huawei and GELSEN-NET to deploy a complete set of urban network solutions that would implement interconnection between hospitals, schools, residential buildings, and public transportation through data centers, routers, switches, and wireless Access Points (APs).

» Huawei's AP8000 series APs feature high performance, superior durability, and stylish designs. They deliver high-performance access capabilities and integrate perfectly into business environments to reshape communications equipment appearance perceptions. More than 100 Wi-Fi hotspots have been deployed using this AP series, affording easy Internet access for improved retail and recreational experiences.

» Huawei has delivered more than 20 high-density stadium projects worldwide, and offers a mature and complete solution delivery experience. Huawei's outdoor APs adopt dual-5G technology and include built-in, small-angle directional antennas as well as built-in surge protectors for radios, network ports, and ACs, which help provide highly reliable and high-concurrency WLANs that afford simultaneous Internet access to a large number of spectators.

Customer Benefits

» **Commercial and pedestrian urban areas:** Newly deployed WLANs cover one commercial pedestrian street and two downtown areas in Gelsenkirchen's Smart City solution, benefiting nearly 50,000 urban users and improving online experiences for tourists and residents.

» **Arena AufSchalke:** Since the stadium's WLAN was constructed, 61,500 football fans can now interact online, purchase souvenirs, and order food at any time, which has boosted spectator retention and enhanced viewing experiences.

» **Residential areas and schools:** More than 700 residential areas, 86 schools, and 100 kindergartens now connect to the Internet through optical fibers, laying a foundation for digital education and Smart City construction.

Future Plan

In the future, Gelsenkirchen wants to leverage WLANs to issue emergency notices, such as inclement weather notifications and traffic information, to facilitate travel and reduce the impacts of disasters. In addition, free Wi-Fi networks will be available in public transport systems and city zoos.

Products

Switches: S12700 and S5720 series
WLAN: Indoor AP5000 series and outdoor AP8000 series
Management platform: eSight, and Agile Controllers