wilhelm.tel provides fiber-to-the-home connectivity

Founded in 1999, wilhelm.tel is a high-performance fiber-optic network provider. With more than 90% of the market share, the German provider of fiber connections is the most dominant in the Hamburg metropolitan area.

One of wilhelm.tel's customers, housing company SAGA Unternehmensgruppe, wanted to provide its 130,000 building tenants in Hamburg with fiber connections to enable high-bandwidth, low-latency connectivity.

As part of this project, wilhelm.tel needed to upgrade their existing fiber backbone network to provide a wider television portfolio, especially for foreign languages, and offer higher bandwidth and lower latency connections.

When looking for a manufacturer to support the deployment, wilhelm.tel wanted an organization with extensive support, powerful hardware and software with excellent value. They also needed a manufacturer with a complete end-to-end solution to supply fiber from the central port all the way to the customers. After meeting all the requirements, wilhelm.tel selected Zyxel Communications. To ensure project success, BMAnetworks then joined the engagement to provide additional first-level support and fulfill all product deliveries from Zyxel Communications.

wilhelm.tel is a regional telecommunications provider based in Norderstedt. As a full-service provider, it supplies large parts of northern Germany with cable TV, internet, telephony and mobile communications for private and business customers.

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Nicolas Fahl
Senior project manager for planning and system integration

This FTTB deployment brought fiber connections to over 130,000 households and provided a major service upgrade with the speed of active ethernet for even more powerful internet. Before Zyxel's FTTB installation, residents only had access to asymmetric digital subscriber lines for a maximum of 16 Mbps download speeds and 1 Mbps upload speeds.

Throughout the engagement, Zyxel has been a proactive and responsive partner. Whenever wilhelm.tel provided a feature request, Zyxel quickly fulfilled it and fully developed individual software within different project-specific requirements. Zyxel's products fully delivered on the promise of behaving in real situations exactly as simulated in Zyxel's laboratory.

"We can look back at years of successful cooperation with Zyxel, especially in the chassis product segment and in customer and technical support," said Nicolas Fahl, senior project manager for planning and system integration, wilhelm.tel. "Together, our companies built a solid foundation and relationship, which is why we were confident in Zyxel's ability to upgrade and extend our fiber connections to each subscriber's household."

Currently, approximately 50 percent of the 130,000 households have full fiber-to-the-home connections for maximum bandwith capabilities. The remaining 50 percent will be completed by the end of 2022. The fiber networks extend from the central office to each individual unit and room. Subscriber download speeds increased from 100 Mbps to 1 Gbps.

wilhelm.tel's challenges

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Zyxel's solutions

Zyxel's IES5200 Series* of Temperature-Hardened Chassis MSAN supports access to VDSL2, GPON and fiber-based GbE services and all service slots work with any service line cards.

With the FTTH installations, the previous 100Mbps FTTB download speeds are increased to over one gigabit per second (Gbps), and the network can potentially be upgraded for speeds reaching up to 10 Gbps.

* The IES5200 Series includes IES5206 and IES5212

Core benefits

- Strong hardware and software capabilities quickly fulfill project-specific requirements.
- Complete end-to-end solution to supply fiber from the central port all the way to the customers.
- Zyxel's proactive and responsive supports.

Featured products

IES5206
5U 6-slot Temperature-Hardened Chassis MSAN

- Maximum 192-port vectoring VDSL density, 200-port Gigabit Ethernet density, 64-port GPON density, or 32-port XGS-PON density
- Flexible ACL, VLAN-aware DHCP, and anti-IP/MAC address spoofing to prevent malicious attacks
- Board-Level Vectoring (BLV) and System-Level Vectoring (SLV)
- Full redundancy of management card and power module
- Sophisticated OAM&P features
- Temperature-hardened for flexible installation

IES5212
8.3U 12-slot Temperature-Hardened Chassis MSAN

- Maximum 192x2-port vectoring VDSL density, 400-port Gigabit Ethernet density, or 160-port GPON density
- Flexible ACL, VLAN-aware DHCP, and anti-IP/MAC address spoofing to prevent malicious attacks
- Board-Level Vectoring (BLV) and System-Level Vectoring (SLV)
- Full redundancy of Management card and power module
- Sophisticated OAM&P features
- Temperature-hardened for flexible installation

For more product information, visit us on the web at https://service-provider.zyxel.com

Customer story wilhelm.tel