Hybrid Wi-Fi Solution Provides Seamless Online Access for Major City Hospital

Caritas-Klinik Dominikus, in Berlin, Germany, gets an integrated wired and wireless network with centralized management.

Customer: Caritas-Klinik Dominikus

Industry: Healthcare
Location: Berlin, Germany
Website: www.dominikus-krankenhaus-berlin.org

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> **André Süß**
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> *Account and Solution Manager, TELBA GmbH*

The Customer

The Dominikus Hospital in Berlin, Germany ("Caritas-Klinik Dominikus") is an emergency hospital with numerous specialist departments including surgery, orthopedics, maternity and radiology. Caritas-Klinik Dominikus has been an integral part of medical care in Berlin for almost 100 years, offering high-quality medical care, individually tailored therapeutic options, and both social and pastoral support for patients. The hospital is part of the Caritas-Krankenhilfe group, which operates four hospitals, two medical centers, a hospice and a nursing academy, across Berlin and Brandenburg.

The hospital's mission: care will be tailored to the individual patient to effectively and efficiently restore them to optimal health. This can only be facilitated when the hospital's network runs smoothly and undergoes continual modernization and development.

As part of the Berlin Senate's public funding program, in 2019 Caritas-Klinik Dominikus was awarded funding to establish a free Wi-Fi network for its patients. So began this project, which was soon extended to provide Wi-Fi to the entire hospital and integrate with the wired network infrastructure. The new wireless network had to meet the stringent requirements of modern healthcare, with a focus on network stability and always-on access to diagnostic imaging and patient data, which is critical to ensure the best possible treatment outcomes. Automated management and easy monitoring of the new network were also needed to save this busy hospital time and money.

Needed: Nonstop Connectivity and Simple Management

Berlin company TELBA GmbH, a long-standing Platinum Partner of Allied Telesis, was challenged to find a wireless network solution that would meet all the hospital's needs. The brief: to plan and implement a brand new, state-of-the-art network to provide always-on wireless access that could easily handle the hospital's many time-critical applications, provide high-performing connectivity for diagnostic imaging and other healthcare systems, and reduce IT administration overhead.

The answer was Allied Telesis. André Süß, Account and Solution Manager of TELBA GmbH recalls meeting with Allied Telesis during the project's planning phases: "There were certainly other competitive offers which initially seemed good, but they could not pass the qualitative tests. Allied Telesis was the only provider that could meet the number one requirement—to provide a unified management system," says Süß.

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> Hospital requirements and technologies change all the time. We provide innovative and easy to manage network solutions for tomorrow's hospitals, and comprehensive support for our partners.
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> **Andreas Mühlhaus**
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> *Berlin Branch Manager and Business Development Manager, DACH, Allied Telesis*

Implementing a New Network During Business Hours

Hospitals never stop working. All the network implementation work—cabling, installing switches and Access Points (APs) and configuring the management environment—had to be done during hospital operation, without affecting patients, and under considerable time pressure.

This might seem impossible, but it's all in a day's work for TELBA GmbH. As an experienced specialist in the healthcare sector, its technicians are well versed in installations during ongoing business operation. And TELBA GmbH doesn't hesitate to recommend Allied Telesis: "Unlike other manufacturers, Allied Telesis provides a real partnership, with competent and dedicated support from A to Z," says Michael Brase, Managing Director of TELBA GmbH.

Allied Telesis Network Solutions: Seamless Connectivity

The hospital chose an integrated wired and wireless solution from Allied Telesis. Core, distribution and edge switches provide the infrastructure to connect diagnostic imaging equipment and other critical systems used in the running of a busy hospital, while Allied Telesis Autonomous Management Framework™ (AMF) automates many day-to-day administrative tasks for plug-and-play networking with zero-touch management.

The edge switches use Power over Ethernet (PoE) to connect and power Allied Telesis TQ5403 APs. These world-first hybrid APs simultaneously support single-channel and multi-channel wireless architectures, providing the advantages of both: seamless roaming for devices on the move, and maximum throughput for equipment in fixed locations.

Allied Telesis Autonomous Wave Control™ (AWC) was employed to manage the wireless APs. AWC automatically analyzes traffic and then optimizes the wireless network to ensure maximum performance and minimal interference, which also reduces deployment and operating costs. At Caritas-Klinik Dominikus, it enables a high-quality Wi-Fi experience that responds dynamically to the way hospital staff access medical systems with their various and highly-specialized wireless devices, as well as supporting free Wi-Fi for patients, their families, and visitors.

The entire network is monitored and managed with the Vista Manager™ EX graphical network management platform, providing single-pane-of-glass visibility of the entire wired and wireless network. This powerful combination easily meets the project's number one requirement for unified management.

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Nonstop Wi-Fi, Nonstop Patient Care

This new network is an important step for the hospital towards securing the future through digital efficiency. The hospital now enjoys a nonstop network that provides improved access to online systems like diagnostic imaging, optimal Wi-Fi for both staff and patients, and simplified network administration for IT staff.

AMF automates management of the wired devices, while AWC automatically optimizes the wireless network to enable seamless access to online hospital resources and applications, from anywhere at any time. These innovative technologies, which currently only Allied Telesis can supply, mean that Caritas-Klinik Dominikus today has one of the most modern and future-oriented solutions in Germany.

AMF, AWC and Vista Manager EX provide IT staff with visibility and actionable reporting for the entire network, with built-in self-healing and reduced administration time—freeing up the hospital's IT department to use its precious resources on new projects that add real benefit to the hospital. With this solution, Caritas-Klinik Dominikus is now exceptionally well-equipped for future applications and digitalization in the healthcare sector.