

SECURE, HIGH-AVAILABILITY NETWORKING OF HOSPITALS AND CARE FACILITIES AT THE ST. FRANCIS FOUNDATION IN MÜNSTER

A high-availability network ensures smooth communication and secure data sharing within the St. Francis Foundation

FAC'T IT GmbH is the St. Francis Foundation's IT service provider, responsible for securely linking 13 hospitals and nine care facilities. In the Foundation's operations, whether involving emergency admissions, inpatient treatment or long-term therapy, data reliability plays a crucial role, since having swift access to patient information is a basic requirement in the work done by doctors and other hospital staff. If patient data and medical applications are not constantly available due to poor network performance, valuable time can be lost.

So the partnership between the staff and facilities of the St. Francis Foundation requires a very secure high-performance network. These tough standards are met by a high-availability, secure MPLS (Multiprotocol Label Switching) network, managed by T-Systems, which links all the facilities to one another via a shared data center. Meanwhile, the Foundation remains flexible and future-proof, because the bandwidths can be scaled up to meet the customer's needs at short notice, and other facilities can be integrated without any problem.

AT A GLANCE

- Shared MPLS network enables data to be shared quickly and securely between the Foundation's staff and facilities
- Rapid access to relevant data takes pressure off doctors, makes processes leaner and improves healthcare quality
- Two IntraSelect modules: Fixed Connect and the optional Remote Connect
- Implementation, operation and maintenance provided by a strong partner as an all-in service concept
- Documented compliance with service level agreements and agreed response times
- An innovative backup strategy ensures enhanced stability
- Transparent monitoring via a web portal enables peaks to be identified and requirements to be prioritized so that critical applications are always available
- The scalable network solution, easy to expand, is flexible and future-proof



THE REFERENCE IN DETAIL

THE CUSTOMER. FAC'T IT GmbH is the FAC'T Group's IT service company and, as such, forms part of the St. Francis Foundation and its associated facilities. It is responsible for securely networking 13 hospitals plus nine facilities for the disabled and the elderly in the states of North Rhine-Westphalia and Bremen. The facilities tend to approximately 490,000 in- and outpatients per year. Based in Münster, the St. Francis Foundation was established in 1997 by nurses belonging to the Franciscan order, and is the largest Catholic hospital group in north-west Germany. In 2004, to enhance their facilities' future prospects, the order integrated the hospitals it had built and operated into the St. Francis Foundation. As a private, non-profit-making group, the religious trust pursues charitable goals, and its management is based on modern principles.

THE TASK. The uncontrolled proliferation of providers within the Foundation, and the extremely heterogeneous IT and telecommunications infrastructure was proving an obstacle to introducing standardized operational processes. Yet, in the healthcare sector, having permanent access to data and complex medical applications is a basic requirement for doctors and care staff. In the worst case, poor network performance can endanger people's lives.

A secure, high-performance network solution based on a high-availability MPLS platform, separated from the Internet, would assist in this. FAC'T IT looked for a strong, reliable partner with an integrated service strategy to plan, implement, operate and manage the network that was to be developed. Switching rapidly from the previous provider to T-Systems was a particular challenge – but T-Systems satisfied the client in full and without any problems. The challenges facing the new structures were tough. There had to be maximum security and constant availability when medical data was shared and applications operated. Bottlenecks and peaks needed to be dealt with efficiently.

And, if the St. Francis Foundation's new infrastructure was to be able to meet the challenges in the rapidly changing healthcare market and be future-proof, it had to be flexible and capable of expansion.

THE SOLUTION. After assessing T-Systems' bid, the Telekom subsidiary was contracted to develop and run, with end-to-end responsibility, an MPLS network integrating 17 St. Francis Foundation facilities. A central data center ensures that the patient data and highly complex medical applications enjoy maximum security and availability.

The Fixed Connect module establishes the connection between the care facilities. The second module, Remote Connect, securely and optionally integrates smaller facilities and mobile users into the hospital network. Broadband widths in the modules can be scaled up to several gigabits. An innovative backup policy with redundant routers and lines ensures enhanced stability. There are standard service level agreements for all the modules. These cover such details as provision, network availability

of 99.9 % for the key applications, and specific response times. A web portal is used to monitor network loads. The data flow is regulated using service classes. This means that business-critical medical applications take priority on the network.

All the components in the solution are certified and comply with the norms and standards in the healthcare sector.

The infrastructure implemented by T-Systems offers unlimited flexibility and potential for expansion, so any new facilities or healthcare services can be seamlessly integrated. Data center connectivity and connectivity to cloud services are also possible. FAC'T IT has already extended the network substantially and, given the rapidly changing healthcare market, is planning further upgrades.

network guarantees that the Foundation's facilities can share data quickly and securely. Sensitive medical data can be shared securely, and business-critical applications are guaranteed to be available. FAC'T IT particularly benefits from the excellent service quality – T-Systems delivers everything, from implementation and transfer of the existing lines, through operations to maintenance, as an all-in-one service. T-Systems provides integrated network management with fully standar-dized service and management processes, 24 hours per day, 7 days per week. For the St. Francis Foundation, this means that a central, highly skilled partner with a service desk in Germany will provide immediate

THE CUSTOMER BENEFITS. The high-availability MPLS

assistance in the event of any disruption. The central network components are guaranteed an availability of 99.9 % by the extensive service level agreements defined in the contract. And the innovative backup policy contributes to exceptional stability. The transparent billing and monitoring system helps the St. Francis Foundation to plan with confidence. Bottlenecks and peaks can be identified immediately. Modular packages, optional bandwidths and the potential for upgrading, including adding more applications, make the St. Francis Foundation flexible and future-proof. New facilities can easily be integrated at any time.







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