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A Solution for Munich Airport:
Campus LAN integrates state-of-the-art
technologies.



High speed, MPLS, and wireless functionality—Munich Airport is equipped with an ultra-modern Local Area Network from T-Systems.

Convergent. Fast. Failsafe: T-Systems delivers the network for the airport of the future.

The customer. Flughafen München GmbH (FMG) in Munich operates Germany's second largest commercial airport, handling over 23 million passengers a year and cargo volumes in excess of 140,000 metric tons. With passenger figures expected to double by 2015, a second terminal has recently been added to accommodate this growth. Munich is the most technologically advanced of Germany's airports, and FMG aims to leverage its leadership position and industry expertise as a consultant to other domestic and international airports.



The brief. Reliable, high-performance information and communications technology is essential if airports are to keep passengers and cargo moving. Maximum availability and speed were therefore key requirements for FMG. The airport operator is responsible for running the network and delivering custom IT infrastructure solutions to a diverse user base. It was therefore crucial to the company that all parties involved—including airlines, passengers, and airport-based businesses, such as cargo carriers—could be seamlessly integrated into the network. The campus LAN also needed to connect the individual buildings scattered across the extensive airport site.

System requirements. In addition to offering high bandwidth and redundancy, the new network had to allow the creation of numerous Virtual Private Networks (VPNs) for airlines and corporate customers. It also had to be capable of handling all the airport's internal data flow for information displays, check-in counters, baggage distribution, etc. Additionally, the airport wanted a public wireless LAN to provide passengers in the waiting areas with Internet access, and a similar system to facilitate communication between employees responsible for moving passengers, flight crews, and customer baggage around the airport.

The T-Systems solution. Based on the overall concept defined by FMG, T-Systems created a Gigabit Ethernet campus LAN featuring Multi Protocol Label Switching (MPLS). The use of MPLS technology throughout the LAN supports the flexible creation of VPNs—a total of 128 virtual

LANs (VLAN) can be set up for customer use. These customer-specific networks are fully independent of each other, while redundant MPLS network nodes ensure maximum availability. Two wireless LANs are also hooked up to the MPLS campus LAN, linking mobile staff to the airport network. The solution includes a network management system, detailed documentation, and a custom-designed training program for the airport's network specialists.

When it comes to adding new capabilities to the network, such as Voice over IP and advanced network management and security functions, FMG can continue to rely on the speed and flexibility of T-Systems.

Customer benefits. T-Systems was able to meet all of FMG's challenging IT demands by drawing on the full range of Deutsche Telekom Group technologies and skills, with the parent company's extensive LAN expertise proving particularly valuable.

The T-Systems commitment to outstanding service guarantees FMG immediate restoration of the network in the event of a fault, while passengers benefit from the option of Internet access via a wireless LAN. The choice of MPLS gives customers such as airlines and cargo carriers all the advantages of a state-of-the-art IT infrastructure. With its high levels of failure protection, scalability, and future-proofing, the campus LAN offers clear cost benefits and enables Munich Airport to serve as a model for other airport operators wishing to deploy advanced IT systems.

At a glance:

- Convergent campus LAN solution integrates multiple state-of-the-art technologies
- Performance and availability meet the challenges of an airport environment
- Redundant configuration guarantees maximum failure protection
- End-to-end MPLS backbone
- Integration of mobile staff via wireless LAN
- Flexible scope for customer networks through MPLS-based VPNs
- Future-proof solution that can serve as a model for other airports

Any Questions?

Please visit our Website or send us an e-mail.

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