LAN SERVICES

Flexible, secure, future-proof

The increasing levels of digitization also mean that local networks are increasingly put under pressure. Reliable high-performance inward and outward support for your digitized processes is essential as a basis for your corporate communication. IP traffic will continue to rise strongly on a global level, and will exceed the two zeta byte mark in the next two years. A great share of this generated by Cloud services, which are on the rise. This affects not only Wide Area Networks, but also the Local Area Networks (LANs), because it is there that all traffic starts or reaches its destination in the company. In addition to increasing data traffic, a significantly larger complexity is created through new services and applications in the LAN infrastructures that have grown in most cases. Overall, significantly higher efforts and operational risks in the LAN area have to be expected. In many cases, despite the urgent need to upgrade the local networks, the technical know-how required for this is not fully available. As a result, the rising requirements imposed on these networks are not always adequately met. T-Systems’ Inhouse portfolio is the state-of-the-art response to all current and future requirements that companies have regarding LAN and WLAN – company-wide and standardized. With the LAN Infrastructure segments, the portfolio covers the needs of customers who implement their own solution – from HW acquisition to consultation and provision of services when needed – and also those who opt for Managed LAN Services so that they can reserve the available resources for their core business and have an all-around worry-free service.
MANAGED LAN SERVICES

Managed LAN Services is a complete solution for a company-wide homogeneous inhouse network, whereby T-Systems seamlessly assumes all tasks involving the active components and develops the LAN according to customer wishes. Managed LAN Services are available from 200 LAN ports. At any size, the solution offers the economies of scale and cost advantages of a large and efficient platform. In addition, there are standardized SLAs, optional network services such as Radius, DHCP etc. and round-the-clock service. The modular network design of the Managed LAN Services is based on standards which exactly map the specific requirements of the relevant company but which can be operated very efficiently.

Scope of Performance and Services

- Planning, installation and rollout
- Proactive monitoring and management
- Incident, problem, change, release management
- Restoration pursuant to SLA
- Service Level Reporting
- Security fixes and patches

Benefits

**Individuality**
Small changes can be implemented by yourself, such as deactivation and activation of ports for moves

**Availability**
- Global availability
- Dedicated SLAs
- Rapid implementation thanks to standardized processes
- Secure operation through automated production
- Failure security through proactive management
- Upload of software fixed only after verification
- Immediately available Remote Service
- In Germany, T-Systems has its own, hardware manufacturer certified service staff for operation and fault clearance

**Costs**
- Individual pricing models with flexible configuration of one-time costs and monthly operating costs
- Options for hardware purchase (one-time costs and monthly operating costs) or hardware rental (Opex instead of Capex with flexible port pricing model)
- When managing the customer’s hardware, the operating costs are charged monthly
- Up to 25 percent less expensive than own operation

**Flexibility**
- Simplicity of location expansions, network configuration and port management
- Optional expansion to WLAN functionality (controller-based and Cloud-based) as well as network services
**Net-based LAN.** Net-based LAN is ideal for the fast equipment of areas or locations with WLAN. The managed WLAN service uses the customer’s existing LAN. The hardware is shipped to the customer, who can easily install it without great own know-how and connect the new access points to the LAN box. Each access point is configured centrally from the Cloud, completely automatically based on the network information aligned in advance with the customer.

**Benefits**
- Controller-free solution
- Rapid installation via plug & play without interventions into the existing LAN structures
- Flexible expansion options
- Service 24/7 and defined SLAs
- Fixed price product with simple pricing model
- Secure operation by T-Systems in a German data center with German data protection
- Encrypted transfer of configuration data
- Highest performance thanks to the new Mimo-3 technology

**HotSpot Suite.** The HotSpot Service from Deutsche Telekom AG can be integrated into the current LAN infrastructure, to provide Internet access to customers and guests.

**Benefits**
- Rapid installation thanks to plug & play
- Individualization through a personal homepage with your own images and texts
- Easy for users to operate
- No risk through the “disturber liability” (§8 of the German Telemedia Act, TMG), which lies with Deutsche Telekom AG
- Security of the Telekom Cloud
- Solution used in thousands of companies

**Flexible Onboarding.** Flexible onboarding takes the company’s current LAN to the target LAN architecture step by step, with all of the desired features regarding service etc. This requires a complete assessment of the current network and the definition of the target. After the scanning of the network, the LAN operation is in the hands of T-Systems. Then the network is transferred to the extended Current Mode of Operation (CMO+). The network is adjusted for efficient operation, such as through replacement of old components or changes to design and configuration. The last step includes all measures and migrations to achieve the target situation that has been agreed upon, the Future Mode of Operation (FMO).

**Benefits**
- Seamless transition and transformation
- Protection of investment through use of own LAN hardware
- Rapid take over of operation and short project run times
- Relieves the customer’s own IT employees
- Take over of existing service provider agreements with various run times
LAN INFRASTRUCTURE

If companies want to operate their LAN themselves, but want to benefit from external know-how in planning and implementation and if the installation as well as the rollout management is too expensive to handle alone, they can use the following LAN Infrastructure services throughout Germany:

- Consultation and design
- Planning
- Procurement of hardware, software and licenses
- Rollout and installation
- Documentation
- Service

Benefits

Expertise
- Great know-how and more than 20 years of experience
- Experts certified by the manufacturers
- Competency well beyond LAN
- Technology partnerships on the highest level

Services
- Expert support in design and configuration
- Service desk and defined fault clearance or start times for various manufacturers
- Complete coverage through own technicians and engineers

Costs
- Economies of scale of a major buyer
- Pricing models
  - Hardware and software purchasing (one-time costs for hardware and software)
  - Hardware rental: Financing models that are flexible and oriented to individual
  - Requirements (liquidity-saving, balance neutral and cash-flow optimized)

Service Options. In order to guarantee availability at the highest level even for companies’ own LANS, T-Systems offers a number of need-based service options from error search to reparation on site.

Fixed repair times:
- Fault clearance within the defined fixed repair times
- Can be selected in stages from 4 to 72 hours
- Fixed defined service availability and reaction times
- Includes technician visits on site
- Provision of replacement parts, software updates

Fixed delivery and beginning / access times:
- Economical alternative to defined repair times
- Beginning of fault clearance within defined times
- Can be selected in stages from 4 to 24 hours
- Provision of replacement hardware within defined shipping times
- With on-site option including an on-site technician
- Defined access times, within which T-Systems starts remote access

Benefits
- Fault registration 24/7
- Use of trained service technicians and engineers
- In all geographical areas

Component Purchasing. T-Systems supports customers who operate their own networks completely by themselves across Germany in the acquisition of:

- Hardware (correctly dimensioned active components)
- Software
- Licenses

Benefits
- Economies of scale from the large buyer T-Systems
- Products from leading manufacturers
Network Services. (Option for Managed LAN Services and LAN Infrastructure) To implement basic protection in the LAN, T-Systems offers all relevant expansions:

DNS: Domain Name Service
- Indexing service
- Resolution of IP Addresses / Name

DHCP: Dynamic Host Configuration Protocol
- Assignment of IP addresses to clients
- IP address management

RADIUS: Remote Authentication Dial-In User Service
- Authentication
- Authorization
- Accounting

NAC: Network Access Control
- Compliance check
- Quarantine
- Trigger client update

Guest access
- Access control
- Administration via portal
- Bring your own device
- Connection to the Active Directory
- Mail / SMS Service

Benefits
- Stand-alone also available
- Customer-optimized structure
- Top solution partner
- Enterprise Grade

Why choose T-Systems?
All over the world, T-Systems provides service for approximately 3 million LAN ports, and manages more than 1.5 million LAN ports, 40 percent of which are international. The Telekom subsidiary offers a broad, current network as well as security know-how and delivers the highest degree of professionalism with its manufacturer-certified specialists. The network management is based on standardized methods and processes. This industrialization approach and economies of scale ensure a high degree of efficiency, which leads to significant price advantages. The access to offshore capacities, optimized purchasing conditions and specialized Competence Center provide for additional cost advantages and increases in quality in the service. As a specialized provider, T-Systems offers a number of service levels meeting the requirements of the user-companies. These include service and provision times as well as automatic order and delivery processes.
T-Systems has a strong portfolio of managed LAN and WLAN services, including per-port utility options.

Gartner Magic Quadrant Network Services, February 2017

Analysts confirm the inhouse competence

Partnerships with leading providers

T-Systems develops its services around Local Area Networks, consistently toward Cloud Managed and Software Defined LAN. Net-based LAN is only an example of a first step into this new world, in which networks will organize, segment, optimize and dynamically adjust themselves in the future.