

# Case Study

## Connecting on-premises setup to AWS cloud

In cooperation with



### Executive summary

The telco provider has asked T-Systems to implement a highly available, scalable, redundant, and encrypted networking solution to AWS. This new solution helps the customer to grow and develop further customer solutions on top of AWS.

### About the customer

The telco company has been a fixture in the mobile communications market for the last twelve years. With over 4.5 million customers, the telco provider is very successful. To ensure future success, their business model was further developed into a robust product brand.

### The challenge

The customer requires a highly resilient and secure connection from the on-premises network to the AWS resources. The solution must be scalable and meet security requirements set for the existing on-premises network.

The networking requirements are as follows:

- Highly available network infrastructure
- Redundant set-up
- Fast turn-around cycles to add additional services



### The solution

The purpose of the solution is to provide an encrypted on-premises/cloud interconnect that can be used transparently for DevOps teams that have hybrid services with parts in the on-premises and parts in the cloud. The connection to the on-premises datacenter is realized via AWS Direct Connect in a redundant way with Fortinet Fortigate firewalls and AWS Transit Gateway. The implementation of AWS Direct Connect ensures stable bandwidth and latency required by the customer. IPsec VPN powered by AWS Site-to-Site VPN is implemented to encrypt data at transport to respond to the high security restrictions. In addition to that, the AWS Transit Gateway ensures scalability.

The following components are deployed:

- AWS Direct Connect
- AWS Site-to-Site VPN
- AWS Transit Gateway



## Results and benefits

With the architecture described here, T-Systems has provided a highly redundant and scalable networking solution. The setup responds to high and demanding levels of security requirements originally applied to the on-premises solution.

The created solution is highly flexible which reduces costs and optimizes the time required for the implementation of new use cases.

## About the partner

With a footprint in more than 20 countries, T-Systems is one of the world's leading vendor-independent providers of digital services headquartered in Europe. The Deutsche Telekom subsidiary offers one-stop shopping: from secure operation of legacy systems and classical ICT services, transition services to cloud solutions as well as new business models and innovation projects in the Internet of Things (IoT). T-Systems is also an accredited AWS Managed Service Provider (MSP) and Premier Consulting Partner with more than 500 experts on AWS with a growing list of competencies that include cloud migration, SAP system integration and consultancy support with the AWS Well-Architected Framework.

Moreover, T-Systems is an official AWS Direct Connect delivery partner, which means it is in the position to handle hosted-connections.

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