Executive Summary

LucaNet AG provides consultancy and software products for financial planning, financial consolidation and controlling. LucaNet AG develops and supports their software products which are deployed for different clients worldwide.

Currently the hosting of the software installations can be provided for German based clients in a data center in Frankfurt. Non-German locations or partners have either to provide the hosting infrastructure by themselves or the software cannot be offered in this particular location. An essential part of the software solution – the LucaNet Financial Warehouse – has to be hosted on customer site. The customer has to provide the infrastructure and operations for it by themselves.

The given project aims a design, installation and configuration of the LNCloud infrastructure on the AWS Cloud. The strategic goal of this project was to develop a cloud product, enable the possibility to scale globally and establish a full managed operations support for the cloud infrastructure. Key success factors are scalability, reliability and availability, which justifies making the transition to a public cloud infrastructure. These key aspects must be accompanied by security considerations and appropriate backup concepts for data and systems.

The Challenge

- Challenge 1: The LucaNet LNCloud Software is currently hosted and managed in a co-location in Frankfurt. Foreign locations are not supported.
- Challenge 2: LucaNet. Financial Warehouse product, an important part of the software, cannot be deployed in the LNCloud and would be hosted at client side separately.
- Challenge 3: Costs of the provisioned infrastructure are not transparent and cannot be mapped to specific usage of LucaNet customers.

Why T-Systems as a partner

T-Systems has a proven track record of delivering solutions complying with challenging security requirements while preserving the agility of the public cloud. T-Systems offers comprehensive Cloud consulting and engineering for AWS across the whole application stack. In addition to proven cloud security experts, T-Systems also has certified AWS security specialists.

About LucaNet

Founded in 1999, LucaNet AG has now been providing software and consulting to support its customers with financial consolidation, planning, reporting and analysis for more than 15 years.

Beyond a Financial Performance Management software for accounting, the company also provide comprehensive training and expert consulting to ensure you get the most out of our tools.

The Solution

T-Systems fulfilled the transition of a traditionally hosted application to AWS by leveraging cloud-native services like AWS Managed VPN, AWS WAF, AWS Relational Database Service, AWS EC2, AWS S3 and others. The deployment is accomplished by automating infrastructure provisioning with the automation framework HashiCorp Terraform.
The transition of LNCloud applications was a mix of re-platforming and re-architecting strategies. Following picture gives a broad overview of LNCloud architecture on AWS Cloud

Several design decisions were made during the collaborated work between LucaNet and T-Systems:

- For the sake of network separation and security, every of the LucaNet customer infrastructure is deployed into a separate VPC.
- AWS RDS replaces previous self-installed and self-managed Postgres Databases.
- Self-installed, configured and maintained software VPN are replaced by AWS managed IPSec VPN.
- Traditional backup procedures were replaced by backing up directly into S3.

When a new LucaNet customer should be onboarded, Lucanet fills out a short pre-defined Excel list which will be sent to T-Systems Service Desk. T-Systems colleagues use the provided data from the Excel list to parameterize the terraform scripts and executes automated deployment of a new VPC environment with preconfigured infrastructure services such as AWS EC2, RDS, S3 Bucket, IPSec VPN in a full automated manner. All VPC environments are fully monitored and managed by T-Systems.

**Results and Benefits**

LucaNet is now able to onboard their customers on LNCloud backed by AWS infrastructure within a couple of days instead of weeks. T-Systems takes care of all deployment, monitoring and managing work for all workloads in Lucanet’s AWS account.

With the help of the 24/7 availability of the T-Systems Service Desk, LucaNet can be confident that all their customers in every geographical location consume the same grade of support.

T-Systems Cost Optimization Manager enables LucaNet additionally to have transparent cost per their customer by using tag-based cost filtering.

By using Telekom Security and Compliance monitoring, LucaNet enjoys a high grade of confidence that their customers workloads are running on a highly secured and continuously monitored infrastructure. To make sure a client AWS account follows strict Telekom security & compliance guidelines, T-Systems uses PacBot as a central security & compliance platform. PacBot defines rules for maintaining a hardened cloud infrastructure. These current configurations is continuously and automatically tested against these rules to maintain the defined security and compliance baseline.

Highly supportive services like GuardDuty, Inspector and Trusted Advisor deliver additional grade of secure networking and OS environment which prepare the workloads being audited and certified for ISO and SOC Type2 certifications.

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“T-Systems AWS Managed Services enables us to onboard and migrate multiple customers much faster than we were able to do before. With the AWS Cloud we can enter new markets and our scalable infrastructure persists in a secure, compliant and auditable manner. Through T-Systems’ many years of experience, we were able to create a secure, stable and highly available environment and offer our customers the highest possible level of availability and security for their data.”

Dennis Krause
Senior IT Administrator Operations – LucaNet AG

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Next Steps

T-Systems will continue support LucaNet by performing consulting, providing Well Architected Reviews and implementing secure and cost optimized Cloud practices for serving Lucanet Business Development around the globe.

A key success factor is to establish an automated ordering process for Lucanet Client to get access to their software solutions, hence the introduction of Infrastructure as Code for Lucanet’s client.

**About APN Partner**

T-Systems is a global IT services and consulting company. The company has a global infrastructure consisting of data centers and networks. As an AWS Advanced Consulting Partner, T-Systems provides over 100 certified experts who provide strategic advice and care about the actuality and further development of the booked features, as well as full (cost) transparency. Collaboration starts with choosing the right services and tools from the AWS universe.