NTT DATA

Germany | Technology

SysEleven customers benefit from georedundancy and high availability

Client profile

SysEleven is a leading cloud and Kubernetes service provider specializing in the operation of distributed and mission-critical systems and the rapid scaling of workloads. They deliver a large portfolio of comprehensive services – from concept consulting and setting up test environments to training and fully managed operations. Headquartered in Berlin, SysEleven was founded in 2007 by Marc Korthaus.

Why Frankfurt?

- More than 92,000m² of server space across four sites
- 170MW+ of critical IT load shared among our seventeen data center buildings
- Fully-fitted colocation space, racks, cages and private suites
- 24x7 Remote Hands services
- Technology Experience Lab to test and validate new technologies
- Frankfurt is home to the DE-CIX, one of the world's largest internet exchanges

SysEleven

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Our focus is on security and reliability. By expanding our services to a third region, our customers benefit from full georedundancy. We have been able to offer our customers high-availability solutions with NTT's Global Data Centers division.

Jens Plogsties, Chief Technology Officer, SysEleven GmbH

Summary

Reliability, speed and security are at the heart of everything that SysEleven does. Numerous well-known brands – such as DFS Aviation Services, Babymarkt, FTAPI, Staffbase, Senatsverwaltung Berlin, brand eins und Golem.de– as well as NGOs and public organizations rely on the cloud and Kubernetes services they provide.

In addition to their two existing regions in Berlin, SysEleven established a third, georedundant region in one of the latest buildings at our Frankfurt 1 Data Center in 2021. Their homogeneous infrastructure with state-of-the-art technology offers their customers numerous advantages , such as a doubling of local storage performance and an increase of 30% in compute power. This new location is also directly connected to the existing point of presence (PoP) in the neighbouring building via a crosslink at 100 Gbps, and to their closed, Europe-wide 100G ring, in compliance with all data protection requirements.

Business need

Kubernetes in a secure, scalable environment

When it comes to secure and reliable network and Kubernetes services, SysEleven aims to serve their clients as a one-stop-shop, combining the

basic functions of Kubernetes with their unique opensource based and lock-in free framework creates a secure and highly reliable platform. This allows organizations of all types to develop and orchestrate their Kubernetes applications quickly and easily through SysEleven's managed-Kubernetes solution "MetaKube" and their "MetaKube Accelerator".

In addition to Kubernetes services, SysEleven addresses another key area for their German clients: data security in cloud environments. Their cloud services comply fully with GDPR regulations because they use infrastructure located entirely in Europe. By expanding their infrastructure with a georedundant third region, the service provider can now offer their customers the option to exercise effective and sustainable disaster recovery strategies.

Solution

Colocation in Frankfurt as starting point for optimization

Taking the decision to establish a third region within the SysEleven network led to the question of where to collocate it. As Frankfurt fulfils all requirements for providing georedundancy in terms of distance to Berlin, as well as being viewed as one of the key data hubs in Europe, SysEleven decided that this was the optimal location for their third region. To establish their European 100G network, SysEleven had already implemented two PoPs in our data centers in Berlin and Frankfurt, elevating the trust they place in our Global Data Centers division.

Since the Frankfurt 1 location meets the highest security standards and holds multiple certificates such as ISO 27001, ISO 50600 and PCI-DSS, SysEleven chose one of the latest buildings to house their new region.
They also rented racks in our high-security data center environment which further ensures strict access control, to provide a more secure environment.

Outcomes

Enhanced performance

Migrating an existing cloud cluster under load is a difficult task. But for the SysEleven team, the construction of the third region also offered an enormous opportunity. Here, both hardware and software could be optimally coordinated with each other right from the start.
Due to the homogeneous hardware infrastructure, customers now benefit from a 25% increase in cluster performance compared to the previous regions. In addition, the logical infrastructure was optimized when the virtual machines were installed. The SysEleven team was successfully supported in the implementation by our Remote Hands service

New functionality

At the same time, SysEleven took advantage of the occasion to implement new services: For example, the 'data encryption at rest' option allows them to individually encrypt personal data on individual devices to protect data from misuse. Even if this risk – especially in a data center as secure as Frankfurt 1, which meets all Tier 3 criteria – exists only in theory, it is required by many security regulations. Plus, the use of extended address space through the IPv6 protocol, as well as the option for additional test protocols with "network health checks", is also possible in Frankfurt. The services they're implementing for the first time in Frankfurt 1 will also be replicated at the other locations.

GDPR-compliant services

Direct access to SysEleven's European 100G ring is also guaranteed at Frankfurt 1. Their new colocation space is connected directly to their PoP via a crosslink. All data remains within the SysEleven infrastructure, guaranteeing data protection-compliant transfer and storage in the cloud. Especially for customers from the public sector, but also for NGOs and other organizations that increasingly struggle with denial-of-service attacks, a closed ring offers significantly higher security.

Higher availability

SysEleven customers gain a clear advantage from tighter data security that the third, georedundant location provides. Whether for emergency backup data center services or for active failover, it's essential to have a sustainable data strategy for critical infrastructure. If necessary, they also provide their customers with advice on individual disaster recovery concepts. The high security standards that the Frankfurt 1 data center fulfills, and the high availability it ensures, deliver the optimal infrastructure for this purpose.

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