

Scaling a SaaS Platform with Geo-Redundant Private Cloud Infrastructure for FLIGHTKEYS

Customer Challenge

For any SaaS provider like FLIGHTKEYS, availability is not just a technical requirement. It is a business imperative. FLIGHTKEYS offers its customers a modern, web-based and individually configurable flight management and trajectory optimization system and service, which is used by airlines and business jet operators worldwide.

As customer adoption increased and the platform continued to evolve, the underlying infrastructure had to meet growing demands for resilience, scalability, and performance. The existing geo-redundant setup, spanning multiple data centers in Vienna and Düsseldorf, provided a strong foundation. However, future growth required an architecture capable of delivering higher availability, greater flexibility, and seamless scalability across regions.

Solution

In partnership with Timewarp, the platform was transformed into a highly available Private Cloud environment built on a geo-redundant IaaS architecture.

What began as a multi-site deployment across Vienna and Düsseldorf evolved into a globally distributed infrastructure spanning multiple independent data center locations in Vienna and the United States. By leveraging geographically separated sites, redundant networking, highly available storage, and automated failover mechanisms, the platform was designed to withstand infrastructure failures without impacting service availability.

The solution includes:

- Multiple independent data center locations in Vienna
- Additional redundancy across three U.S. locations
- Highly available storage and compute resources
- Redundant network and internet connectivity
- Automated failover and disaster recovery capabilities
- Centralized monitoring and proactive operations management
- On-demand scalability for compute, storage, and network resources

This architecture provides the resilience required for business-critical SaaS workloads while supporting continued international growth.

Business Outcomes

The new platform delivers a robust foundation for long-term expansion and operational excellence.

Key benefits include:

- High availability across multiple geographic regions
- Reduced risk of downtime and service disruption
- Scalable infrastructure supporting growing customer demand
- Improved resilience through geo-redundancy
- Consistent performance for international users
- A future-proof platform for innovation and growth

"Working with our partner Timewarp is characterized by a high degree of professionalism, elegant problem-solving expertise, short decision-making paths, and true collaboration between equals. Together, we have built a solid and highly available platform that enables us to sustainably scale our products and solutions as a SaaS provider."

Benjamin Rippitsch, COO Flightkeys

Conclusion

What started as a traditional geo-redundancy strategy between data centers in Vienna and Düsseldorf has evolved into a globally distributed Private Cloud platform engineered for resilience, scalability, and continuous availability.

By combining geo-redundancy, highly available infrastructure, and the flexibility of a managed IaaS platform, Timewarp has helped create the technological foundation needed to support business growth, ensure service continuity, and deliver enterprise-grade SaaS solutions at scale.