Swisscom is Switzerland’s leading telecom company and one of its leading IT companies. To bring new digital services to market faster, Swisscom wants to increase the speed and efficiency of its application development. VMware® Enterprise PKS enables Swisscom to take a leadership position in the emerging Kubernetes-as-a-Service (KaaS) market. It reduces development costs, improves development times, and creates freedom of choice around cloud deployments. It also strengthens a long-term, strategic relationship with VMware.

Increase the speed and efficiency of application development

Swisscom is a telecom leader, but it recognizes that to compete with new providers with disruptive business models, it needs to diversify its revenue streams.

To compensate for declining revenue in the telecoms sector, Swisscom has decided to evolve its business model to emphasize customer experience, operational excellence, and new growth.

“Revenue from landlines and mobiles is only going one way,” says Olivier Fournier, senior DevOps engineer, Swisscom. “Today, we largely operate as an IT full service provider, working with many of Switzerland’s largest enterprises.”
VMware Enterprise PKS addresses a broad range of Kubernetes challenges such as networking, security, storage, monitoring and logging. This is achieved by including VMware NSX-T™ Data Center and integrating with other VMware products. VMware Enterprise PKS runs seamlessly on VMware vSphere®, as well as on public clouds like Google Cloud Platform, Amazon EC2 and Microsoft Azure.

Fournier says the use of NSX-T Data Center was critical in keeping customer workloads separate: “It meant we could host multiple customers without any risk of data ‘bleeding’ between environments. We have to ensure this clean separation.”

“We’re heavily audited. VMware Enterprise PKS means we can prove that data is secure.”

Other options were explored, Fournier admits, including building a Kubernetes-as-a-Service from scratch. “But this would have proved impossible to be built by only a small team. The beauty of VMware Enterprise PKS was that it integrated with our existing VMware ecosystem, making it possible to develop and operate our K8s Service with only a few resources.”

Strong relationship with key enterprise customers

The successful launch of KaaS strengthens Swisscom’s position in the Swiss market and makes world-class IT services available to the country’s enterprise customers. This supports innovation and digital transformation for both Swisscom and its customers.

Operational since summer 2019, Fournier says VMware Enterprise PKS has already reduced development costs, improved time to market, and created freedom of choice around cloud deployments. All of which can be managed by a small team. Equally important, it strengthens a strategic relationship with VMware.

“The multitenancy aspect was the most important element, but it was not supported at the beginning. We had to work with VMware to ensure we had this multitenancy capability. This work was really important. It demonstrates this is more than a customer/supplier relationship.”

The company is providing an increasing number of cloud services. Swisscom’s Enterprise Service Cloud delivers infrastructure from the cloud, seamlessly linking on-premise and virtual private environments. This requires Swisscom to adopt an ‘as-a-service’ mindset, with a relentless need to add new innovation.

To bring new digital services to market faster, Swisscom wants to increase the speed and efficiency of its application development. It wants to make this available for internal workloads, but, as an IT service provider, it also wants to make this available to enterprise customers as ‘Kubernetes-as-a-Service’.

Kubernetes is an open source system for automating deployment, scaling, and managing of containerized applications. It groups containers that make up an application into logical units for easy management and discovery. Being open source, Kubernetes allows the freedom to take advantage of on-premises, hybrid, or public cloud infrastructure, letting users effortlessly move workloads where appropriate.

Swisscom needs to be able to run Kubernetes in multiple cloud environments, including Azure, AWS and Google Cloud Platform. It needs to do so in a way that is secure and easy to manage.

“The main criteria was that we needed to onboard multiple customers on the same infrastructure,” says Fournier.

Hosting multiple customers with enhanced security

VMware Enterprise PKS enables Swisscom to operationalize Kubernetes for multi-cloud enterprises and service providers. It is the latest initiative in a long-term engagement between Swisscom and VMware.

With enterprise features such as enhanced security, high availability, rolling upgrade, constant health monitoring and self-healing, VMware Enterprise PKS is built for running critical workloads in production.

“It was that it integrated with our existing VMware ecosystem.”

OLIVIER FOURNIER
SENIOR DEVOPS ENGINEER, SWISSCOM

“Fournier says the use of NSX-T Data Center was critical in keeping customer workloads separate: “It meant we could host multiple customers without any risk of data ‘bleeding’ between environments. We have to ensure this clean separation.””

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The successful launch of KaaS reflects market demand: more enterprise customers are developing new services based on containers or moving existing workloads to containers. Swisscom can serve these customers, keeping data within Switzerland and benefiting from the flexibility of the cloud.

Fournier says he expects KaaS to act as a gateway to further enterprise services: “It is a business enabler. We can onboard new customers to KaaS, then offer them additional services.”

Swisscom has a leading position in this emerging market and is committed to expanding this position and strengthening its own strategic relationship with key corporate customers.

Just as there is a mutual benefit from working closely with VMware – with Swisscom having access to a VMware product specialist and visibility of its technology roadmap – Fournier says the business is better for getting closer to its enterprise customers:

“We get live feedback on how KaaS is performing, and better understand the customer’s challenges. The customer sees Swisscom as a responsive market leader.”

Looking ahead

The future promises continued growth in cloud services for Swiss companies. Swisscom expects to see more mainstream workloads moving to cloud, not just developers.

Swisscom is exploring VMware Tanzu to develop cloud-native apps and maintain existing apps side by side, on the same enterprise-grade platform. The company is also interested in the ability of VMware vSphere 7 with Kubernetes to accelerate innovation by converging containers and VMs into the vSphere platform with native Kubernetes.

“One of our big challenges next year will be to embrace multi-cloud technology. With VMware Tanzu and VMware vSphere 7 with Kubernetes, we’re confident VMware can help us in this area,” says Fournier.