**Overview**

QSC is a major provider of IT and communication services in Germany, offering a broad range of consulting and managed, hosted and colocated services from three TÜV and ISO-certified state-of-the-art data centers. Targeting small and mid-sized businesses, QSC acts as an expert one-stop provider to guide German companies into the digital age. Cloud-based procurement models offer increased speed, flexibility, and full service availability.

**Challenge**

Cloud computing offers several advantages to businesses, including agility, shorter time-to-market and greater cost-efficiency. However, adding public-cloud infrastructure may introduce complexity, latency and potential security concerns. QSC could see that its mid-market customers for colocated infrastructure were keen to embrace the speed and convenience of the public cloud, but needed to avoid potential downsides.

For production services, many companies either do not want or are not permitted to move data to the public cloud. In other cases, companies are keen to keep core services on specialized colocated hardware while gaining a fast way to set up new services—especially for software development and testing. To meet both requirements and avoid the latency inherent in connecting to the public cloud over multiple network hops, QSC set out to create a new cloud environment within its own data centers.

Manuel Jenne, Product Manager for Colocation and Hosting at QSC, said: “We want our customers to be able to deploy the exact hardware they need in the colocated environment, and connect those resources seamlessly and securely to highly flexible cloud resources.”

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**Success Story**

QSC AG at a Glance:

QSC AG provides IT-services to small and mid-sized German companies. With decades of experience in cloud, consulting, outsourcing, telecommunications and colocations, QSC guides customers safely into the digital age.

- **Industry and Location**
  IT-Services, Germany

- **Product and Services**
  SUSE Enterprise Storage
  SUSE OpenStack Cloud

- **Results**
  - Increased flexibility for customers without risking security
  - Decreased latency for connecting to cloud resources
  - Created unique hybrid-cloud offering for German mid-market

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“**We believe that combining colocated infrastructure with SUSE OpenStack Cloud gives us a unique proposition in the German market.**”

**MANUEL JENNE**

Product Manager
Colocation and Hosting, QSC
“With SUSE OpenStack Cloud, our customers can configure new private cloud environments rapidly and easily, and flex the resources up and down in a matter of seconds as their requirements change.”

THOMAS FISCHER  
Cloud Architect  
Colocation and Hosting, QSC

Solution
QSC considered several technology platforms for its new cloud offering, rejecting a commercial option from VMware for being too costly and inflexible, and an open-source option from CloudStack for offering limited support and functionality.

“We saw that OpenStack was the most-used cloud platform in the world, with the right combination of features and flexibility for our needs,” said Manuel Jenne. “We thought of building the software from source and supporting it ourselves, but came to the classic ‘build or buy’ decision. We want to stay focused on helping our customers, so we chose to deploy SUSE OpenStack Cloud.”

QSC is building a single integrated interface that will enable colocation customers to manage all their resources—both colocated and in the OpenStack cloud—from one portal. This will be connected to the billing system, so customers can configure and pay for cloud resources on a dynamic basis according to usage.

SUSE OpenStack Cloud provides a production-ready, enterprise-grade deployment of OpenStack backed by expert know-how and support from SUSE. To provide the underlying software-defined storage (SDS) layer, QSC chose SUSE Enterprise Storage, based on Ceph open-source technology.

“Over the years, we have used enterprise storage solutions from major vendors, and have also tried a number of open-source SDS solutions, but never been completely happy with the performance or availability,” said Manuel Jenne. “Based on our experience to date, SUSE Enterprise Storage is better than any solution we have previously tried. It’s exceptionally fast and easy to add capacity, and there are no restrictions or vendor lock-in.”

QSC benefits from using SUSE’s OpenStack distribution, which enables it to focus on supporting customers while SUSE ensures that the underlying technology is in perfect working order.

“QSC is building a single integrated interface that will enable colocation customers to manage all their resources—both colocated and in the OpenStack cloud—from one portal. This will be connected to the billing system, so customers can configure and pay for cloud resources on a dynamic basis according to usage.”

Results
“We believe that combining colocated infrastructure with SUSE OpenStack Cloud gives us a unique proposition in the German market,” said Manuel Jenne. “Our customers can deploy exactly the hardware they need for core services—for example, adding GPUs to servers—and seamlessly connect to cloud resources running inside the same data center. It’s fast, convenient, flexible and secure.”

Rather than traversing multiple network hops over hundreds of kilometers, QSC’s customers enjoy direct local network connections to the cloud. With this architecture, latency is minimized so that businesses can connect a cloud application to a database in the colocated environment with no noticeable performance impact.

“With SUSE OpenStack Cloud, our customers can configure new private cloud environments rapidly and easily, and flex the resources up and down in a matter of seconds as their requirements change,” said Thomas Fischer, Cloud Architect at QSC. “One obvious use case is for testing and development, but we also have customers deploying production systems.”

Contact us at:  
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