

Telco Delivers Fast, Flexible, Secure Services in the Cloud



Swisscom AG collaborates with Cisco Services to optimize on-demand cloud offering.

EXECUTIVE SUMMARY

Customer Name: Swisscom AG

Industry: Telecommunications and IT service provider

Location: Worblaufen, Switzerland

Number of Employees: 19,500

Challenge:

- Automate billing and fulfillment processes in customer-facing cloud portal
- Extend unified cloud capabilities across multiple business units
- Meet stringent security requirements for business-ready cloud solution

Solution:

- Cisco Intelligent Automation for Cloud for on-demand cloud-based workload deployment
- VMware vCloud Director to provision virtual data centers almost instantly
- Cisco Services to optimize solution for full integration of Cisco software and legacy hardware

Results:

- Reduced operational costs by provisioning servers in minutes rather than weeks
- Scaled to manage fluctuation in user demand without increasing IT staff
- Offered more flexible pay-per-use billing options to cloud customers

Challenge

Swisscom AG is the largest telecommunications provider in Switzerland. In addition to providing mobile, digital television, and Internet services to millions of private residents throughout the country, Swisscom also plans, implements, and operates IT and communications infrastructures for businesses of all sizes.

In recent years, Swisscom has encountered a challenge familiar to telecommunications companies (telcos) everywhere. As more customers shift from landlines to mobile devices, and as the mobile market becomes more competitive and complex, many telcos are finding it necessary to create new revenue streams by offering a broader range of services. In 2011, Swisscom confronted this challenge with the introduction of Dynamic Computing Services, a comprehensive cloud offering designed exclusively for Swiss businesses looking for a secure, scalable, cost-effective approach to IT.

Difficulties quickly emerged. “We developed our own customer-facing portal for the cloud offering,” says Thomas Gfeller, product manager at Swisscom. “Almost right away, we could see that our software had serious limitations. The billing and fulfillment processes were insufficiently automated, which resulted in unnecessary operating costs. Customers had very little transparency into the management of their cloud data. And most importantly, the solution was hard-coded and did not offer the configuration flexibility we needed for a rapid time to market of new product features.”

Many of these difficulties arose from the size and diversity of the Swisscom customer base. The company runs four selling organizations, each aimed at a different segment of the corporate market, and Swisscom leadership wanted to integrate all of these units into a centrally managed cloud solution. “For years, each selling unit had its own IT lifecycle,” says Adrian Flückiger, head of cloud infrastructure services corporate business at Swisscom. “That creates a great deal of unnecessary overhead. To make our cloud offering scalable and keep it affordable for our business customers, we needed to extend our IT capabilities across multiple front units.”



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Adrian Flückiger
Head of Cloud Infrastructure Services
Corporate Business
Swisscom AG

Flückiger and his team began the search for a vendor to help Swisscom build a fully integrated, enterprise-wide cloud offering on a hypervisor-agnostic architecture, with the aim of combining various virtualization platforms to meet the company's unique needs. “We needed a vendor with deep experience in deploying and optimizing cloud solutions,” he says. “By attempting to create our own cloud infrastructure with no external assistance, we were simply stealing focus from our own areas of specialization. We saw this challenge as a genuine opportunity to invest in the long-term future of the Swisscom cloud.”

Solution

Competing with two other top cloud vendors, Cisco engaged in an intensive proof-of-concept to demonstrate its capabilities on a wide range of use cases to the Swisscom team. “The proof-of-concept sealed the deal,” says Andreas Arrigoni, head of cloud infrastructure services small and medium business at Swisscom. “We assumed that some use cases would be too challenging for an external vendor, but Cisco proved otherwise. Only Cisco offered a truly dynamic, customizable solution to meet our complex needs.”

Cisco Services was instrumental in making the deployment a success, designing an optimal integration of Cisco Intelligent Automation for Cloud (IAC) software with the Swisscom legacy environment. The Cisco IAC solution offers secure, automated workload deployment in the cloud, with a self-service portal that allows end users to order workloads on demand. Cisco Data Center Optimization Services helped Swisscom understand its technology and operations management architectures. Other solution components include VMware vCloud Director for provisioning virtual data centers, VMware vCenter Orchestrator for developing complex automation tasks within heterogeneous environments, and storage from NetApp and EMC.

Swisscom now offers a standardized catalog of 26 different cloud-based services, including virtual servers, storage, network, and security, all managed through Cisco IAC. Business customers can place orders online and provision a virtual data center in minutes. “The key to the whole solution is the level of customization provided by Cisco Services,” says Simon Ruch, project manager at Swisscom. “Our cloud services are now fully integrated into our billing systems, our incident management system, and even our extranet resources. We've automated some of our most time-consuming processes, and we've gained greater visibility across the enterprise from a single portal. It's a huge improvement.”

Results

For Swisscom, Cisco is not simply a software provider, but also a trusted cloud solutions consultant. “Throughout this implementation, Cisco Services listened to us,” says Flückiger. “They were open to input, because they were committed to finding the right solution for Swisscom. It was a dynamic process. We learned a lot from each other, which is exactly as it should be.”

The Cisco Intelligent Automation for Cloud (IAC) self-service portal offers a level of flexibility that Swisscom simply didn't have before. “With the portal, we now have a separation of the business logic from the GUI,” says Gfeller. “Cisco Services helped us develop the logic, making sure to keep it entirely separate from the graphical presentation. That way, we have total freedom to create our own GUI, maintain our unique corporate identity, and integrate our Cisco IAC portal with other portals. Flexibility is also helpful for localization, which is always a challenge in a country with four official national languages.”

The level of agility achieved from Cisco IAC produces considerable cost savings for Swisscom. “With our new automation capabilities, we can provision servers in minutes rather than weeks,” says Arrigoni. “Better yet, it doesn’t matter whether we have 20 hosts or 2000 hosts, because we can manage those fluctuations in user demand without increasing our IT staff. That leads to a major reduction in operational expenses. Our IT teams are happier, too, because Cisco IAC is an easy-to-use solution that requires very little specialized training while vastly reducing the time necessary to deliver new services.”

With help from Cisco, Swisscom can now offer far more flexible billing options. “At first, we billed our customers on a monthly or quarterly basis,” says Gfeller. “But with the automation capabilities we’ve put into place, we can bill usage on a day-to-day basis. A customer can order a server one day, cancel it two days later, and be billed for only two days. That level of flexibility and value is a major differentiator for us, because it really highlights both the quality and the affordability of our services.”

With greater agility at a lower total cost of ownership, Swisscom customers are in a much better position to plan for the future. “With Dynamic Computing Services in the Swisscom cloud, businesses can liberate their IT departments from the hassle of day-to-day server administration while still maintaining control over key applications and operating systems,” says Flückiger. “Their customers, in turn, enjoy the benefit of more reliable connectivity. In short, everybody wins.”

Next Steps

With the strength and flexibility of Cisco IAC as a foundation, Swisscom is now free to virtualize more services while finding more opportunities for efficiency across the enterprise. “We plan to expand our storage capabilities and offer a wider range of features on all of our services,” says Flückiger. “Another goal is to put multi-cloud services into production. We also want to use Cisco automation packs to transfer more of our in-house functions to automated processes. That’s just in the short term. In the long term, we fully expect that Cisco cloud solutions, backed by the expertise of Cisco Services, will help Swisscom maintain its edge in a very competitive, very challenging market.”

For More Information

- To read more about the Cisco cloud portfolio, go to: www.cisco.com/go/cloud.
- To find out more about Cisco Services, visit: www.cisco.com/go/services.

Cisco Products

- Cisco Intelligent Automation for Cloud (IAC)

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- Design and Integration Services
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