

Swiss SP Courts Clients with Savvy, Affordable Cloud Services



EXECUTIVE SUMMARY

Industry: Cloud and infrastructure services provider

Location: Headquarters in Basel, serves customers throughout Switzerland

Customers: More than 500

Business Challenges

- Expand cloud services business by offering existing and new customers advanced features for greater freedom and control at less cost

Network Solution

- Cisco CSR 1000V virtual router at the edge of customer virtual data centers, Cisco ASR1002-F at the cloud edge
- Cisco UCS B230 M2 blade servers
- Cisco 800 Series and 1900 Series ISR G2s running Cisco IPSec Firewall, DMVPN and LISP software at customer premises

Business Results

- Advanced multitenant VPN capabilities expand service business opportunities
- Central policy enforcement and dynamic routing features enable customers to extend their network into the cloud
- DMVPN support and redundant Internet connections reduce customer communication costs by an estimated 80 percent per year

MiroNet offers differentiated, secure services with Cisco CSR 1000V, cutting customer TCO and monthly carrier costs.

Business Challenges

Swiss-based MiroNet AG offers IT (MiroCare), hosting (MiroHost), and cloud (MiroCloud) services to small and medium-sized businesses throughout Switzerland. A visionary service provider with solid credentials, MiroNet entered the cloud market early with Switzerland's first Cisco® Unified Computing System™ (UCS®) virtualized platform delivering cloud-based services.

Mathias Seiler, head of cloud services at MiroNet, says, "There is still a lot of confusion in the marketplace about the cloud and the services behind it, and gaining trust is essential." Customers continually ask him what happens to their data, where it goes, how is it stored, and how is it secured. Most of their clients want all data storage and backups performed in-country, so customers appreciate that MiroNet owns and operates an independent, fully redundant network so data stays local.

MiroNet wanted to expand its cloud business by offering advanced features that give customers greater freedom and control, such as:

- Choosing their own keys or certificates for site-to-site encryption
- Operating in both IPv6 and IPv4 environments
- Employing dynamic routing protocols for greater VPN flexibility and firewall security
- Extending their cloud from MiroNet to other SPs

Seiler attended the Cisco Cloud Services Router (CSR) 1000V Series product launch at a Cisco Live event and immediately realized that this solution could meet his ambitious requirements.

“I can do pretty much anything on the CSR 1000V that I want, and I can say ‘of course’ to our customers when they approach me with requests or problems to solve. It’s a great feeling.”

Mathias Seiler

Head of Cloud Services
MiroNet AG

Network Solution

The Cisco CSR 1000V Series is a single-tenant software router deployed as a virtual machine (VM) in a multitenant provider-hosted cloud. The software runs on Cisco UCS servers or servers from leading vendors that support VMware ESXi, Citrix XenServer, or Red Hat KVM virtualization.

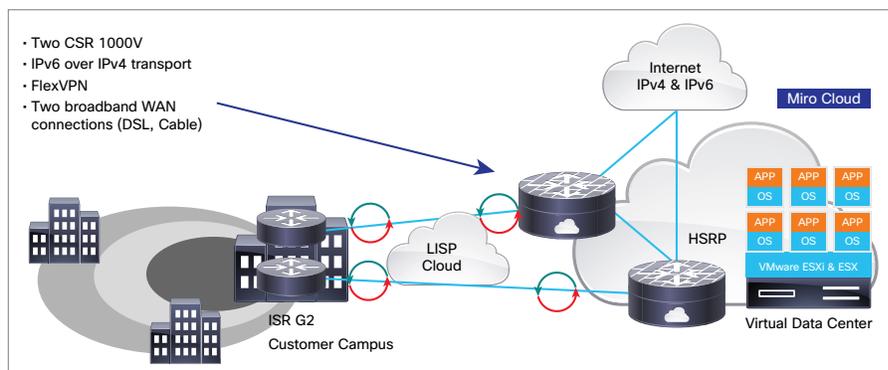
Based on the award-winning Cisco Aggregation Services Router (ASR) design, the CSR 1000V enables MiroNet to provide each customer (or tenant) with its own routing instance and thus individual VPN connections, firewall policies, QoS rules, access control, and so on. Customers essentially have the same level of flexibility, security, and control as they would with their inhouse network. MiroNet typically deploys Cisco ISR G2 800 or 1900 Series routers at smaller customer sites or Cisco ASRs at larger sites.

An unexpected but welcome bonus for Seilers was the speed of CSR 1000V setup in his data center. He says, “It’s quite evident that Cisco engineers worked hard to make sure basic configuration is easy. Another pleasant surprise was that we could start right away with an evaluation license, which is very valuable, because that allows us to demonstrate the service to customers and gauge the business potential without first having to invest in upfront costs.”

Thanks to the CSR 1000V full Dynamic Multipoint IP Sec VPN (DMVPN) support, MiroNet’s customers can securely connect remote sites directly to their cloud deployment. They can also set up fault-tolerant connections to the MiroNet cloud using two inexpensive different broadband Internet links for significantly less than the cost of fully redundant leased lines.

As shown in the figure below, MiroNet uses the Cisco Locator/ID Separation Protocol (LISP) in the CSR 1000V to connect IPv6 hosts in MiroNet cloud over an IPv4 core to ISR G2s at customer sites. LISP helps the service provider simplify hybrid IPv4-IPv6 support and routing, facilitate scalable any-to-any WAN connectivity and support virtual data center mobility.

Figure 1. Mironet’s Cloud-Based Network Based on Cisco CSR 1000V Virtual Routers



Business Results

With the Cisco CSR 1000V solution, MiroNet can offer new and existing customers compelling business benefits for migrating to a full or hybrid cloud.

For customers: Sophisticated, secure, high-quality cloud services for much less. Seiler says, “A fully redundant leased line connection can cost companies an estimated US\$2000 per month. Compare that to an average of US\$367 per month (CSR 1000V service with DMVPN, plus two high-speed Internet connections). That’s an estimated savings of 80 percent per year.”

Add to those sizable savings the fact that cloud customers are already significantly reducing their total cost of ownership (TCO) by eliminating the need for expensive network capital equipment purchases, hardware and software maintenance and upgrades, and power and cooling expenses in their data center and remote sites. Once more, customers can redirect IT resources to furthering primary business objectives. Customers that want to manage their cloud routers can do so in the same way they manage their on-site physical routers.

For MiroNet: Expanding business possibilities. The powerful, flexible, cost-effective capabilities of the Cisco CSR virtual platform greatly extend MiroNet’s revenue horizons. Seiler says, “I can do pretty much anything I want on the CSR 1000V, and I can say ‘of course’ to our customers when they approach me with requests or problems to solve. It’s a great feeling.”

And business opportunities will only increase as the cost of connectivity continues to decrease and bandwidth performance increases. Seiler says, “With Internet providers launching Gigabit per second service with 100 Megabit upload speed, cloud solutions become ever more attractive, and we can build even more reliable cost-effective services.”



For More Information

- For more information on Cisco CSR 1000V virtual routers, visit <http://www.cisco.com/go/csr1000v>.
- For more information on Cisco ISR G2s, visit <http://www.cisco.com/go/isrg2>.
- For more information on cloud solutions for SPs, visit http://www.cisco.com/en/US/netsol/ns991/networking_solutions_market_segment_solution.html.
- For more information on MiroNet, visit <http://www.mironet.ch/en/>.

PRODUCT LIST

At the MiroNet Cloud Data Center

- Cisco CSR 1000V virtual router
- Cisco UCS B230 M2 blade servers
- Cisco ASR1002 routers
- Cisco Nexus 5548UP switches and Cisco Nexus 1000V virtual switches
- EMC VNX storage over Fiber Channel over Ethernet (FCoE)
- VMWare vSphere Hypervisor (ESXi), VMware vCloud Director management software

At Customer Premises

- Cisco ISR G2 800 Series and 1900 Series edge routers running Cisco IPsec Firewall, DMVPN and LISP software



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