

Cloud Connectivity Provider Creates an SDN-Driven Global Open Network

Summary

Company:

InterCloud S.A.S.

Industry:

Service Provider

Business Challenge:

- Meet increasing customer demand with a highly scalable core network
- Provide the highest levels of network and service availability
- Automate network provisioning and planning

Technology Solution:

- [MX104 3D Universal Edge Router](#)
- [MX480 3D Universal Edge Router](#)
- [MX960 3D Universal Edge Router](#)
- [SRX Series Services Gateways](#)
- [ACX5048 Universal Access Router](#)

Business Results:

- Increased the wide area network (WAN) capacity by 100%
- Doubled the number of points of presence (POP) supported
- Expanded the portfolio of secure IT services
- Simplified the operational environment with a common operating, Junos OS



InterCloud S.A.S. specializes in interconnecting enterprises with the largest public and private cloud providers, enabling them to deliver cloud applications around the globe. It was the first private connectivity platform designed for the cloud era, giving its customers a service-oriented platform that allows them to control and shape their connectivity to existing or future cloud applications. InterCloud helps enterprises solve security, performance, and flexibility issues by leveraging multiple public clouds. It operates from offices in Paris and Madrid and has a network footprint across Europe, the U.S., and Asia.

Business Challenge

InterCloud needed to build and maintain a high-performance and highly scalable global core network to meet its customers' demands for connectivity to their cloud applications.

"The more that enterprises embrace the cloud, whether that's a private, public, or hybrid cloud, the more they need high capacity and highly reliable network connectivity," explains Benjamin Ryzman, chief technical officer and founder at InterCloud. "But they also want the flexibility to turn on new services and connections in short timescales."

As well as providing a highly scalable and resilient network for its immediate needs, InterCloud also wanted an open networking platform that could enable automation and flexibility for its customers in the future. "An open, programmable network can facilitate automation through integration with a wide range of commercial, open source, and custom developed toolsets. This enhanced flexibility allows our network to become highly responsive to changing conditions, such as growth and enabling new services," Ryzman says. As networks experience a variety of changes, no single vendor will have an answer for everything, but an open network that supports multivendor environments not only provides best-in-class solutions but creates an infrastructure that can be fully future-proofed.

"Our new network has allowed us to sustain the growing needs of our current customers, along with acquiring new customers who are looking to interconnect their legacy IT applications to the large cloud providers."

Benjamin Ryzman, Chief Technical Officer and Founder, InterCloud



Technology Solution

After a thorough evaluation, InterCloud selected the space and power efficient [Juniper Networks® MX104 and MX480 3D Universal Edge Routers](#) along with the high-capacity [MX960 3D Universal Edge Router](#) to create a highly reliable multi-10GbE MPLS core between all of its points of presence (POPs). Powered by the Juniper Networks Junos® operating system and the programmable Trio chipset, SDN-driven MX Series 3D Universal Edge Routers also connect the InterCloud POPs to some of the world's largest cloud providers, such as Amazon Web Services and Microsoft, and support secure VPN connections to its global customer base.

In addition, InterCloud uses [Juniper Networks® SRX Series Services Gateways](#) and [Juniper Networks® ACX5048 Universal Access Router](#) for its customer premises. SRX Series gateways provide high-performance security with advanced, integrated threat intelligence, delivered on a highly scalable and resilient platform. And with 1GbE/10GbE high port density in a small form factor, the Metro Ethernet Forum (MEF) CE 2.0-certified ACX5048 router is ideal for metro Ethernet deployments, especially in places where rack space and cooling are limited.

“Using Juniper both in the core and for our customer equipment simplifies our operational environment,” Ryzman says. “We have a common operating system across all of our equipment, which means we have a single set of open interfaces to the network. That will make it far easier to integrate advanced automation tools and provide flexible services to our customers.”

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Business Results

InterCloud is now able to keep pace with its customers' requirements for increasing performance and the highest levels of reliability. It has also doubled the capacity in its WAN and the number of POPs in Europe, in the U.S., and Asia.

“Our new network has allowed us to sustain the growing needs of our current customers, along with acquiring new customers who are looking to interconnect their legacy IT applications to the large cloud providers,” explains Ryzman. “And with the flexibility of Juniper's SRX Series family, now we can offer our customers a full portfolio of secure IT services at the edge of our network.”

Next Steps

InterCloud's next initiative is to automate the operation of all its connectivity services using SDN, so that it can provide even greater flexibility and scalability as it faces future increases in services demand. It is currently evaluating both the [Juniper Networks Contrail](#) SDN controller and the [Juniper Networks NorthStar Controller](#) to provide network orchestration.

“We want to develop further the industrialization of the design and deployment of new edge sites. We also want to extend automation and orchestration to better anticipate the impact of new customer connections on the existing backbone,” concludes Ryzman. “Juniper's open platforms and software-defined networking approach give us the flexibility we need to achieve this.”

For More Information

To find out more about Juniper Networks products and solutions, please visit www.juniper.net.

About Juniper Networks

Juniper Networks challenges the status quo with products, solutions and services that transform the economics of networking. Our team co-innovates with customers and partners to deliver automated, scalable and secure networks with agility, performance and value. Additional information can be found at [Juniper Networks](#) or connect with Juniper on [Twitter](#) and [Facebook](#).

Corporate and Sales Headquarters
 Juniper Networks, Inc.
 1133 Innovation Way
 Sunnyvale, CA 94089 USA
 Phone: 888.JUNIPER (888.586.4737)
 or +1.408.745.2000
 Fax: +1.408.745.2100
www.juniper.net

APAC and EMEA Headquarters
 Juniper Networks International B.V.
 Boeing Avenue 240
 1119 PZ Schiphol-Rijk
 Amsterdam, The Netherlands
 Phone: +31.0.207.125.700
 Fax: +31.0.207.125.701



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