INTERCONNECT   Infradata

DUTCH IAAS PROVIDER INTERCONNECT IS PRIMED FOR CLOUD-SCALE GROWTH

Summary

Company:
Interconnect

Industry:
Web Services

Business Challenges:
Scale its cloud, data center, and network services to meet customer demands for Infrastructure as a Service (IaaS).

Technology Solution:
- *MX204 Universal Routing Platform*
- *QFX5100 line of Ethernet Switches*
- *EX4300 Ethernet Switch*

Business Results:
- *Accelerated service delivery while simplifying network operations*
- *Used automation to make configuration changes in minutes, not hours*
- *Easily connected customer resources across multiple data centers using EVPN/VXLAN*

From shops to hospitals to banks, business is digital. Interconnect, a top provider of private cloud, data center, network connectivity, and security in the Netherlands, has been serving digital businesses since 1995. With a reputation as an innovator, Interconnect has relied on Juniper Networks for more than a decade. Supported by Juniper's partner Infradata, Interconnect recently migrated to an IP fabric based on Juniper routing and switching platforms to enable massive scalability and simplify operations.

Interconnect was founded by brothers Rob and Jeroen Stevens, who still serve as the CEO and CTO today. As a regional provider, Interconnect is known for its attentive customer service and deep technical expertise. Customers range from local ad agencies and hospitals to O'Neill, the U.S. surfboard brand, and Vodafone, a multinational telecommunications company.

Interconnect continuously invests in infrastructure to meet the ever-growing needs of businesses. This means scaling its infrastructure services performance and capabilities while delivering the highest levels of availability to meet its 99.9 percent uptime guarantee to customers. It offers a full suite of Infrastructure as a Service (IaaS) and private cloud services. The company operates data centers in Den Bosch and Eindhoven, connected by a fiber ring, and works with other service providers to provide customers with their choice of connectivity.

Interconnect recently upgraded its core network to deliver cloud-scale capacity and scale by adding Juniper solutions. "We implemented an IP fabric to increase scale and gain flexibility in our customer solutions," says Dave Thoonsen, network engineer at Interconnect.

Interconnect's IP fabric uses the Ethernet VPN/Virtual Extensible LAN (EVPN/VXLAN) framework within its data centers, as well as across its MPLS WAN to interconnect its data centers.

"Customers can easily connect to our private cloud. The Juniper IP fabric is a flexible way to stretch a connection anywhere a customer wants."

- Dave Thoonsen, network engineer, Interconnect

"Using EVPN/VXLAN across our Juniper infrastructure makes it easier to provide connections between data centers for our customers," says Thoonsen.

An EVPN/VXLAN architecture enables highly efficient Layer 2/Layer 3 connectivity by eliminating the inefficiencies of Spanning Tree Protocol (STP) and delivering new levels of scale, simplicity, and agility. EVPN/VXLAN decouples the physical underlay network from the virtual overlay network, simplifying Layer 2/Layer 3 connectivity between servers in Interconnect's two data centers while maintaining a consistent underlay architecture.

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The Juniper Networks® MX204 Universal Routing Platform serves as the data center core. The MX204, a cloud-grade, ultra-high 100GbE density platform that is space- and power-optimized, supports routing, switching, and security with comprehensive service features, automation, and telemetry.

In Interconnect's data centers, the IP fabric is implemented with the Juniper Networks QFX5100 line of Ethernet Switches as the spine layer, and the Juniper Networks EX4300 Ethernet Switch as the leaf layer. Leaf-layer switches directly connect to bare-metal servers, virtual servers, or other network devices. Each leaf switch is connected at high speed to the spine, and traffic can be load-balanced over the IP links.

Telemetry, built into the Juniper infrastructure, is also key to Interconnect's high availability strategy. With Junos® Telemetry Interface (JTI), sensors can collect and export data for continuous performance monitoring and to troubleshoot issues such as network congestion in real time.

Interconnect is ready for continued growth. It is expanding its Eindhoven data center to 2200 racks and 6000 square meters of space, as well as building a brand new data center and office building in Den Bosch.

"With a Juniper network, expanding our IP fabric to the new data centers will be easy," says Thoonsen.

Prepared for Growth with Automation

With standard data center building blocks, Interconnect can leverage automation more easily to streamline configuration management. Network automation has led to a significant drop in OpEx and reduced the time-to-market for new services and to onboard new customers.

Juniper Networks Junos operating system, which runs across all Juniper routing, switching, and security platforms, is an essential element in the company's automation strategy. Junos OS integrates easily with DevOps environments and offers programmability, scripting support, open APIs, and support for automation frameworks. Interconnect uses Juniper modules and Ansible playbooks for automation.

"Automation is key for our Juniper fabric," says Thoonsen. "We're currently working on automating our services to automatically provision our backend."

The time savings is dramatic. "We might spend 100 minutes configuring switches or routers in the traditional, manual way," he says. "Now, our goal is to automate the standard configurations which are the building blocks of the services that we offer, decreasing our time to provision a customer to just a couple of minutes."

Automation also improves service availability. "When operators work traditionally, jumping from switch to switch to make configuration changes by hand, there's a lot of room for error which can impact network availability," he says.

Ultimately, automation results in higher customer satisfaction. "We're developing a customer portal where a customer will be able to request services, set up the network connection, and be running in a couple of minutes," says Thoonsen.

A Foundation of Trusted Partners

As a privately held regional provider competing with deep-pocketed global cloud providers, Interconnect stands out for its exceptional customer service and technical expertise. Interconnect's innovation is underpinned by a strong relationship with Infradata, its longtime IT solution provider, as well as Juniper. Infradata is a Juniper Elite Partner with advanced security and enterprise routing specialties and multiple Juniper-certified engineers on staff.

"Infradata and Juniper are on our side. Their responsiveness is on point and we get the support we need."

- Dave Thoonsen, network engineer, Interconnect

"We are proud to be a Juniper customer," says Thoonsen. "Juniper is very good in terms of functionality, stability, and performance, as well as excellent support."

Like Juniper and Infradata, Interconnect is focused on solving difficult problems for its customers, overcoming complexity, and helping businesses focus on what they do best.

"Infradata and Juniper are on our side," says Thoonsen. "Their responsiveness is on point and we get the support we need."

For More Information

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

About Juniper Networks

Juniper Networks brings simplicity to networking with products, solutions and services that connect the world. Through engineering innovation, we remove the constraints and complexities of networking in the cloud era to solve the toughest challenges our customers and partners face daily. At Juniper Networks, we believe that the network is a resource for sharing knowledge and human advancement that changes the world. We are committed to imagining groundbreaking ways to deliver automated, scalable and secure networks to move at the speed of business.

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