



DUOCAST

DUOCAST RAMPS UP NETWORK RECOVERY TIMES TO SAFEGUARD QUALITY OF SERVICE

Summary

Company:

Duocast BV

Industry:

Cloud Hosting

Business Challenges:

Increase network resilience and robustness to ensure speedy recovery in the event of outages, minimizing impact on customer service.

Technology Solution:

- MX204 Universal Routing Platform
- EX4300 Enterprise Switch
- Junos Fusion Provider Edge

Business Results:

- Accelerated recovery times by 98 percent thanks to faster updates to routing tables, improving service quality
- Increased throughput 5x, to 400 Gbps, with a routing platform half the physical size of the previous solution
- Reduced time required for network management thanks to the simplicity of the Juniper architecture
- Enabled Duocast to expand hybrid cloud offerings thanks to enhanced connectivity

Duocast provides IT services such as managed hosting, co-location, and connectivity solutions to enterprise customers in the northern Netherlands. Based in the city of Groningen, the company has built a loyal customer base over the last 14 years, including businesses, local government departments, healthcare providers, and banks—many with mission-critical IT requirements.

The sheer volume of Internet traffic and network growth makes it increasingly difficult for providers to deliver high-quality, uninterrupted services. For Duocast, the most common causes of downtime are link failures and outages in networks managed by its third-party transit providers. When this occurs, the company must make thousands of updates to its routing table to ensure traffic can reach its destination—something its existing routing platform struggled with.

Fabian Labohm, Chief Executive Officer at Duocast, explains: “Although our clients come from many different industry sectors, all demand the same levels of high performance and availability. The big challenge for us is to ensure resilience within our network, so that we can recover quickly in the event of downtime and minimize the impact for our customers.

“Our existing infrastructure had served us well but was starting to struggle with the growing demand on the network. For example, in the event of backbone link failure, it was a relatively simple task to detect and identify what had gone wrong. But to update the routing tables and redirect the traffic was a time-consuming process, with potential risk of human error being done under time pressure, and this risked impacting negatively the experience our customers received.”

“Working with Juniper Networks gives us access to the very best infrastructure available, and our partnership will ensure that we continue to thrive now and in the future.”

- Fabian Labohm, Chief Executive Officer, Duocast

Technology Solution

After assessing solutions from several leading vendors, Duocast decided to modernize its infrastructure with Juniper Networks® MX204 Universal Routing Platform, the EX4300 Ethernet Switch, and Junos Fusion Provider Edge fabric technology.

Junos Fusion Provider Edge enables the ultra-high density, 400 Gbps-capable MX204 routers to function as aggregation devices for the EX4300 Ethernet Switch, which acts as a satellite device, making all the platforms appear to managers as a single device. The combined solution simplifies operations and increases the number of available network interfaces for data traffic, enabling a significant increase in throughput levels.

“We have worked with Juniper Networks for nearly a decade now, and our teams have an in-depth knowledge of the Junos operating system, so we knew that we would be able to hit the ground running with these solutions,” explains Labohm. “What was most impressive about each MX204 router is that it will enable us to increase network performance while taking up just a single rack space position in the data center—making it easy to drop in and replace the older setup.”

The Junos Fusion architecture also smoothed the switchover process, as the company’s previous routing platform had a greater number of network ports than the MX204. By using the EX4300 switch to extend the number of available ports, Duocast can effectively slot in the new solution as a like-for-like replacement.

Duocast completed the implementation with assistance from Juniper Networks. The support included a demonstration session that allowed Duocast to test how the MX204 platform would respond to its unique workloads, ask questions of Juniper experts, and establish operational processes. Following this, Duocast conducted the migration, replacing its old hardware in just three weekends.

“The support and communication we have with Juniper continues to be first-class,” says Labohm. “We like the fact that we don’t just get pushed to a helpdesk whenever we have queries, but can contact our local sales and technical representatives whenever needed. We also appreciate the fact that Juniper is so proactive in the networking community in the Netherlands; for example, sponsoring events that make it easy for us to stay on top of the latest developments.”

Business Results

With the new Juniper Networks solution at the heart of its operations, Duocast has built a more robust, resilient network. In the event of link failure, the Juniper technology allows Duocast to reroute traffic automatically over more effective paths, ensuring it reaches its destination quickly and helping the company deliver on its promise of high-quality, uninterrupted service for customers.

Similarly, the Junos Fusion solution eliminates complexity by centralizing management of multiple network components,

enabling Duocast to cut its administrative workload by more than half, leaving employees more time to focus on value-added tasks.

As Fabian Labohm explains, “Thanks to the Juniper platform, we can recover from disruptions to the network much faster. Previously, it took half an hour to update the routing table and even longer for the network to recover; now, this process is complete in 30 seconds—98 percent faster than before and a massive improvement, which will contribute to an improved experience for our customers.”

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Duocast’s customers will also benefit from greater throughput thanks to the latest Juniper deployment. By migrating to the MX204 platform, network throughput has increased five-fold, from 80 Gbps to 400 Gbps, despite the new solution taking up only half the physical rack space of the former system.

“To increase performance fivefold would normally require a service provider to invest in a much larger routing platform and incur greater initial and ongoing power and cooling costs. The MX204 solution gives us just the right combination of speed and size for our needs, so we can avoid that extra spend,” Fabian Labohm says.

The Juniper Networks solution will also let Duocast expand and enhance its cloud offerings, as clients might also look to host elements of their setup with public cloud providers such as Amazon Web Services and Microsoft Azure.

“With the Juniper infrastructure, we have the connectivity and bandwidth to configure a hybrid cloud service, ensuring we can satisfy the rising demand among businesses looking for a more flexible hosting package,” says Labohm. “We have simplified our network and reached a more agile way of offering services with Juniper solutions.

“Our routing platforms are critical to the service we offer to our users and the ongoing success of our business. Working with Juniper Networks gives us access to the very best infrastructure available, and our partnership will ensure that we continue to thrive now and in the future.”

For More Information

To find out more about Juniper Networks products and solutions, please visit <http://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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