

ISP network with high scalability and service

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next layer is an owner-managed, independent, Austrian service provider, founded and led by pioneers of the Austrian Internet. The innovative and growth-oriented company operates an Austria-wide data communication network based on state-of-the-art technologies and three data centres in Vienna and provides cloud and managed IT services exclusively for business customers, content providers and other service providers. The comprehensive range of services extends from connectivity services to data centre services to the operation management and outsourcing of entire IT processes. Since the company was founded in 2004, an individual, high-quality service at a good price-performance ratio has come first. That's why next layer uses Juniper Networks' high-performance networking solutions throughout its network.

CHALLENGES

The service provider business is characterized by a fast pace, technological advances and increasing demands on the network infrastructure. On the one hand, networking is becoming denser, and next layer has to constantly meet the growing demand for bandwidth and speed to meet its customers' ever-increasing needs. On the other hand, the demanding clientele expects more functionality combined with high stability and rapid convergence at a good price.

Many criteria that were considered an add-on a few years ago are now taken for granted and accordingly no longer honoured. More performance at the same price has long been the reality for next layer. The challenge for the Internet Service Provider is to rapidly expand and renew the technical infrastructure, to ensure availability while keeping costs under control, to operate profitably, and to offer good value for money to its customers.

"In order to keep up with the pace of changing conditions, we need to build our network so that we can scale easily, seamlessly, and cost-effectively," said Christian Mandel, Head of Network Operations at next layer. "Our customers expect 24x7 availability, more performance, and assuming that multiple features are deployed and everything is 100% stable - that is what we want to deliver to our customers, and we need the right infrastructure for that."

SOLUTIONS

From the very beginning, next layer was interested in a strategic technology partner who understands the specific requirements of a local service provider and who can optimally support them with innovative solutions. Christian Mandel explains, “We chose Juniper Networks because the manufacturer was always focused on carriers and ISPs, and as a result developed products that are tailored to our needs.”



We see ourselves in good hands at Juniper Networks and well prepared for the future. Christian Mandel Head of Network Operations, next layer

In addition, the price-performance ratio and the flexible use of the products were the decisive

criteria. “We quickly found ourselves in the Juniper Networks product range. We need devices that scale mid-range, but still provide the full power spectrum and cover all the features of large models – and that’s what distinguishes Juniper Networks,” says Christian Mandel enthusiastically. A concrete example of this is the support of MPLS, which is not only available on the large devices for the service provider market at Juniper Networks, but also in the Datacenter products. “Especially in terms of price and performance, we feel very comfortable. Of course, other manufacturers are leading scalable models for carriers and telcos. For an Austrian service provider like us, however, these solutions are usually not within reasonable limits as far as the order of magnitude is concerned. At Juniper Networks, we can start with the right systems and then scale up,” continued the Head of Network Operations.

Next layer uses for the routing area the Universal Edge Router of the 3D-Series, which offers outstanding capacity, port density, performance, and stability as a product line, as well as the ruggedly designed ACX Series Universal Access Routers. In the switching area, the company relies on the powerful data centre switches of the QFX series with their high port density. “These components also convinced us with their power and space requirements and the cost per port. Factors that are essential to a service provider like us.”

RESULTS

Together with the network specialists of ngworx, the Austrian Internet Service Provider has succeeded in establishing a flexible and high-performance network infrastructure that can easily and quickly adapt to the needs of the market. With the cross-network operating system Junos OS, processes can be automated and all Juniper Networks products – both physical and virtual – managed via a uniform user interface. This saves time, ensures efficiency and simplifies daily operations.

“With ngworx we have a long-standing partnership, characterized by an open relationship and mutual appreciation. Our teams are very similar and we follow the same principles, so we just fit together well in every way,” reveals Christian Mandel. “The colleagues at ngworx are true experts in network solutions with deep technical know-how and a focus on Juniper Networks. They also bring tremendous understanding and sensitivity to our business. Whether it is about order processing, logistics, maintenance contracts or assistance in finding solutions to problems or about forcing certain issues in the direction of the manufacturer: it is an immense added value, if necessary to such a competent and reliable partner as ngworx to be able to fall back. “

Since its foundation in 2004, next layer has grown steadily and has massively developed its network infrastructure to meet increasing customer requirements. The Internet Service Provider has invested not only in the expansion of new data centre locations but also in the performance of their network. For example, next layer today has an Austria-wide backbone with several 100 Gbit/s and is

present at all relevant European Internet Exchanges. The new core network is equipped with expandable, fully redundant chassis routers and will, therefore, continue to provide sufficient capacity in the future. The in-house engineering team at next layer takes care of analyzing the traffic flow on a daily basis. This will enable you to work with ngworx and Juniper Networks to identify strategies and plan upcoming enhancements or changes, extensively test potential new products, and validate the solution design under real-world laboratory conditions.

Christian Mandel notes: “We see ourselves in good hands at Juniper Networks and well prepared for the future. The manufacturer not only offered us the ideal platform with its products but also leaves us all possibilities open in the future. This gives us the agility we need to serve the ever-growing needs of our customers as a service provider, as well as keep costs out of control. “