

With A10 Networks, ngworx.ag resolves Leucom's IPv4 addressing issues

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written by Noam Suisa

Head of Business Development & Administration

Carrier-grade NAT solves address problem

Leucom has concluded that Carrier-Grade NAT (CGN) brings the optimal solution: the provider no longer assigns a public but a private IPv4 address to its customers. A CGN gateway at the provider translates this private address into a public one for access to the Internet, with several customers sharing one of the rarer public addresses. Looking for the best possible CGN solution, Tobler first looked at the environment of a partner who had implemented CGN with their existing network infrastructure.

In further research, the IT director came across the CGN gateway Thunder CGN from A10 Networks. «This product convinced me. The manufacturer focuses entirely on CGN and other specialized technologies such as Application Delivery, DDoS Protection and IPv6 Transition - it is not about a general network provider that enables a little CGN along the way.»

High-performance CGN infrastructure

“The A10 distributor Boll responded to our request very quickly - we got a good presentation and could clarify everything necessary in an open discussion. The chemistry has been right from the beginning, “says Tobler enthusiastically. A proof-of-concept, realized with a test device together with the reseller ngworx and the experts from A10 Networks, has completely convinced Leucom that A10 was the right choice. The first contact with BOLL and ngworx took place at the beginning of 2017. Afterwards, everything ran at top speed: by the end of March, 3000 customers had already migrated to the new CGN environment. The speed of implementation has also surprised the ngworx.

Business Development Manager Noam Suisa says: “All project partners agreed immediately. We are

delighted that this project was completed quickly and efficiently.» Leucom made the transition gradually, starting with the lowest-priced subscriptions launched at the end of 2016. Christoph Tobler: «We started slowly, first with 100, then with 500 customers per week. Between 100 and 200 customers share a public address. So we could get feedback and check customer satisfaction.»



The chemistry with the distributor BOLL, the manufacturer A10 and the reseller ngworx.ag has been right from the beginning. Christoph Tobler Head of IT, Leucom-Gruppe

There were problems with less than one per cent of migrated customers. Most of them did not notice anything about the changeover. This was also the clear goal of Leucom: “We feel obligated as a provider that the CGN migration runs absolutely transparently for the customers and no

handicap arises.” According to Christoph Tobler, a few small problems were already solved in the first test with ten customers, including himself.

A round solution. Because: The complete migration to IPv6 with its extensive address space would indeed solve the IPv4 scarcity problem. According to Christoph Tobler, however, this would not be opportune for Leucom: “The changeover would be very complex, and we could not yet implement everything we need with the current possibilities.”

High-performance CGN infrastructure

Leucom currently operates two Thunder CGN units. Should one fail, the other takes over the routing of the defective unit in the short term. The appliances are located in Zurich, where the connection of their network to the Internet backbone takes place. For the future, Leucom plans a third device at the Frauenfeld site. However, this would not be necessary for performance reasons: At the moment, the CPU load of the appliances is just five per cent. According to the A10, a Thunder CGN appliance can handle as many as 15,000 customers – so Leucom can easily grow until its existing CGN gateways reach their performance limits. And with the other features of the Thunder CGN platform, which Leucom has not yet used, the provider is well prepared for a future migration to IPv6.

A10 Thunder CGN – high-performance Carriergrade NAT

A10 Networks’ provides with the IPv4 Scaling and IPv6 Transition technology Thunder CGN a superior, high-performance, carrier-grade networking platform from IPv4 to IPv6. Flexible carrier-grade NAT and other innovative features make it possible to extend the lifecycle of the IPv4 infrastructure and provide time to prepare carefully for the IPv6 transition