Interhyp upgrades its campus and datacentres with Arista Networks to accelerate ongoing digital transformation strategy

Highlights

Challenge

Interhyp's legacy network was proving an impediment to achieving its digital transformation strategy prompting its upgrade to a unified cognitive campus solution able meet its performance and reliability needs with the ability to flexibly scale.

Solutions

- Innovative leaf and spine architecture provides flexible deployment options across its campus and datacentre environment.
- Arista 7000 series spine combined with Arista 720X Series Cognitive Campus POE Leaf Switches delivers wire-speed layer 2 and layer 3 features.
- CloudVision for network automation and orchestration.

Results

- High density switching within a mesh architecture for extreme scalability and reliability.
- Improved resiliency with lower latency plus increased networking agility offering a seamless upgrade path.
- Open architecture supported by CloudVision and Arista EOS enable zero-trust security transition and advanced automation capabilities.

As Germany's largest, independent mortgage broker, Interhyp has pioneered the use of innovative technology to help millions of customers find the best mortgage deals. With digital transformation an ongoing priority, Interhyp has upgraded its Munich headquarter campus and connected data centres with Arista's cognitive campus technology to improve performance, resiliency and unlock the potential of automation to help it adapt to its evolving needs.

interhyp

Company Background

Interhyp is Germany's largest independent residential mortgage broker that combines the power of the Internet with high quality mortgage advice. Its staff of 1600 help customers choose from the products of over 500 mortgage lenders to provide borrowers with rates that are significantly below those of traditional branch-based retail banks. Interhyp became part of ING Group, a multinational banking and financial services corporation, in 2008.

Challenge

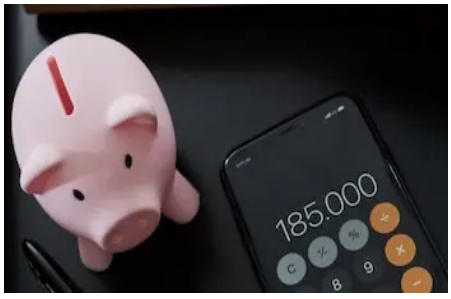
Interhyp has grown significantly since its foundation in 1999 and has pioneered the use of technology to deliver innovative internet-based technologies. The company also expanded its branch network and today has over 100 locations connected to its headquarters and main datacentres at its campus in Munich.

In recent years, Interhyp had undergone a digital transformation of its core IT including large scale virtualisation of its applications. However, its aging campus network based largely on 10G and 1G copper was starting to become a bottleneck for its progressive strategy. So, at the start of 2019, it commenced a major project to upgrade its legacy three-tier network architecture to a higher performance and more resilient leaf and spine architecture based around full fibre architecture.

As Andreas Kufner and Carlo Taddei, Network Engineers and Technical Project Leads for Interhyp explain, "Our plan was to build a mesh between our two data centres and the headquarters to deliver better performance and resiliency and provide a future proof infrastructure for all connected elements." The networking upgrade was also critical for an ongoing renewal program that touches on key database and storage infrastructure and that would benefit significantly from the move to the new 100G core and 10gb end point connectivity.

Solution

Although Interhyp had been with its legacy networking provider for several decades, it was felt during the technical evaluation process that Arista's implementation of VXLAN, a vital element for its network segmentation requirements and its flexible and open leaf and spine architecture was the most suited to Interhyp's long-term network evolution – and wider – IT strategy.



The main project is based around Arista 7280 series switches which are purpose built around a flexible arrangement of 10/25/40/100GbE ports with up to 12 terabits per second throughput and ultra-deep packet buffer up to 32GB.

All Arista products including the 7280R Series runs the same Arista EOS® software, binary image simplifying network administration with a single standard across all switches. Arista EOS is a modular switch operating system with a unique state sharing architecture that cleanly separates switch state from protocol processing and application logic.

These were complemented by nearly 150 Arista 720X Series Cognitive Campus POE Leaf Switches to deliver wire speed connectivity for all campus user workloads under the management and monitoring of Arista cognitive campus services. The 720X series are designed for flexibility with options for 10M to 5G PoE copper PoE downlink and 25G SFP28 and 100G QSFP.

Conclusion

This flexibility was critical and allowed the Interhyp network team to implement a phased upgrade without downtime or interruption to its 24/7 service delivery model. "The Arista approach was so flexible," say Kufner and Taddei, "If you consider, we started with just two leafs per datacentre and campus and, two years later, we now have a spine and 6 leafs per datacentre. In effect, we expanded our core by three times the capacity in just two years without any problems. That's the real benefit, you can adapt quickly, when you need it – and that's really cool."

Even during the challenges posed by the global pandemic, the focused team at Interhyp carried out the major refresh and hit its projected go-live date in early 2021. The initial benefits included a massive increase in available bandwidth, performance and reduction in latency especially for areas like its security zone and internet gateways.

Another major change was the deep integration of Arista CloudVision® to provide the networking teams with enhanced visibility across the network. The software has also proven useful for troubleshooting as part of an ongoing project to move to a zero-trust security architecture.

The Team also praise the support Interhyp received from Arista during the project. Mr Kufner says, "I think one big difference is our experience of the Arista TAC. When you talk to the Arista engineers, you have the feeling that you are talking immediately with someone who has a deep technical background – you're not repeating yourself three times and have the feeling the support engineer understands your problem."

With the bulk of the project complete, the team are now looking at ways to improve ongoing management tasks. The plan is to use a combination of CloudVision and the unified nature of the EOS architecture to increase the amount of automation across the network and streamline operations. "It is definitely easier to script something now," he says, "before we had to consider like three different types of switch operating systems all from the same vendor - but with different command sets and config commands. But now, it's way simpler to create something and roll it out in the whole environment with just one config that is valid for every device."

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