ANEXIA EMPOWERS EUROPEAN BACKBONE

WITH PAM4 AND OPEN LINE NETWORKING



Offering customized solutions for web and managed hosting, as well as software and application development, Anexia is a rising star on the European service and cloud provider market. The company was founded in 2006 in Klagenfurt, Austria, and now serves local and international clients from offices in Vienna, Munich, Cologne and New York City.

Three years ago, Anexia embarked on a significant journey. With a continuously growing client base and the demand for transporting increasingly more traffic over the network, Anexia faced an immediate need to add more network capacity.

Many of the clients being active in time-critical businesses such as e-commerce or media streaming put great demands not on only fast but also failsafe connections. DDoS attacks representing one of the biggest challenges for today's IT operations, Anexia also saw the need to create a network with an even thicker skin against the malicious threat, protecting its network and customers against security attacks.

Robust, reliable infrastructure

Theo Voss, Head of Network and Infrastructure at Anexia, explains how he and his team came to the decision to revaluate their complete networking infrastructure: "To strengthen our customer offering and be able to continuously provide high-quality hosting services, we decided to create a brand-new European backbone network! The following question was how this should be done. Our trusted integration partner Xantaro pointed us in the directions of Juniper Networks for their MX-Series routers and Smartoptics for their innovative DWDM networking solutions."

Flexible open-line solutions secure cost-efficiency

"There are several reasons we decided on the Smartoptics DWDM solutions for our new network. Firstly, the possibility to use a transponder-less solution was a key requirement. With Smartoptics' open line solution DCP-M40-PAM4 and COLORZ ™ PAM4 technology from Inphi we can embed the DWDM connectivity directly into the routers.

The alternative, to use CFP transceivers, was never an option. CFP transceivers with a form factor almost ten times the size of QSFP28 PAM4 added to the significant cost of router interfaces, would have been both too costly and energy consuming for us", said Voss.

The possibility to combine different types of services, Fibre Channel, 10G, 100G and, if needed, even 1T in the same platform was another key advantage of the Smartoptics networking solution when comparing to the alternatives.

CLIENT QUOTE

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Theo Voss Head of Network and Infrastructure, Anexia

smartoptics

anexia



"Anexia is a fast growing, cost-conscious company and we need to spend our money where we get the most in return. The possibility to use the same solution to cater for different clients' individual needs, without the need to invest in a dedicated system for each technology, was a key success factor", explains Theo Voss.

A third demand for the new network goes hand-in-hand with Anexia's focus on streamlining their delivery and support processes. "One of the most significant factors is the provision of an API, allowing us to integrate the Smartoptics equipment directly to our management and provisioning system. In this way we can automatically provision new DWDM services for our clients, without the need to log on to different services manually.

We have also launched a customer self-service portal within our Anexia Engine where our clients can order new services and control their network settings directly, rather than having to call or mail in to place an order. Services can now be booked or cancelled at any time and within minutes and the network quickly and flexibly adapted to the requirements of each customer. Less work for us and a smoother experience for our clients!"

A reliable network

Today, Anexia's European backbone network reaches from Vienna to Nuremberg and Frankfurt with plans for an extension to Amsterdam within short. Data center locations in all metropolitan areas are interconnected over redundant DWDM systems, enabling Anexia to meet the demand for 100 Gbit wavelengths for its own network and clients.





The network offers a total capacity of 2Tb per second with connections to leading carriers such as Telia Carrier, NTT Communications and Deutsche Telekom. Private network interconnects to all well-known internet providers with more than 100 Gbit/sec guarantee fast and reliable interconnections.

Close attention has also been given to the fully redundant connections of different carriers and Internet exchange points. "The project represents the biggest investment that Anexia has ever made in our infrastructure and network. The network upgrade has given us all we needed in terms of increased performance and the highest level of redundancy.

The distributed and largely automated infrastructure also enables to avert large DDoS attacks. This gives our customers even more security – and a more peaceful night's sleep also at peak times. Now that we have proven to ourselves and the market that our innovative approach to networking really works, the European project will serve as a blueprint for further, planned expansion of our World Wide Cloud network", Theo Voss concludes.

