dualstack

netplusFR SA

Successful transformation of the backbone infrastructure at netplusFR

INITIAL SITUATION

netplusFR, founded in 2012 through a partnership between Groupe E, Gruyère Energie and IB-Murten, offers comprehensive telecommunications services to the residents of the canton of Fribourg. With innovative products and excellent customer service, netplusFR has established itself as a leading provider in the telecommunications sector. The company supplies over 17,000 households and companies with television, Internet, landline and mobile telephony. The "bli bla blo" combined offer gives customers access to digital TV, ultra-fast Internet and a landline connection.

"**The new backbone infrastructure** has significantly simplified our operational processes and improved scalability. We can now respond more quickly to our **customers' needs** and offer them **a more reliable service.**"

Patrick Gaudin,
Technical Director, netplusFR SA

REQUIREMENTS

To remain a leader in the highly competitive telecommunications market, netplusFR needed a modernized backbone infrastructure that would not only reduce operating costs, but also improve efficiency and scalability. The existing infrastructure was complex and difficult to manage, resulting in high operating costs. A simplified and consolidated infrastructure should increase flexibility and enable the rapid deployment of new connections without the need for extensive hardware upgrades. This enables netplusFR to respond more quickly to market changes and improve customer service.

PROJECT

The project included the planning and implementation of a new border/BNG layer, a core layer and an optical DWDM transport solution. A redundant and geographically distributed BNG layer was integrated to provide the termination of the IPTV streams and the LNS functionality for the integration of the BBCS connection. This has simplified the infrastructure and significantly reduced the number of devices in operation. Customer traffic is now transported in EVPN instances on the IP/MPLS backbone. To this end, the existing access ring topology was integrated into the new architecture and now offers flexible options for connecting access components from any manufacturer. A new OSS system for monitoring and operating the

transport, backbone and access network elements was also planned and implemented.

dualstack AG played a central role in the implementation of the project. The dualstack specialists worked closely with netplusFR to plan and design the new infrastructure. They developed the migration concept and carried out the backbone migration work as well as the first migrations of the access rings. This close collaboration and continuous hands-on training enabled netplusFR to migrate a large part of the access rings independently - with dualstack AG as a strong partner in the background.

The high number of access components required an adapted approach. In order to carry out the migration phase smoothly and with minimal impact on customers, redundant migration connections were created between the old and new infrastructure. This temporary setup paid off in full - it enabled the gradual migration.

This approach made it possible to migrate to the new infrastructure with minimal disruption to the respective customers and with full operational reliability at the same time. The new DWDM layer also enabled the flexible provision of transport capacities of up to 1.6 Tbps per wavelength. This enables netplusFR to expand new capacity quickly and easily as required.

In addition, dualstack AG created the operational documentation and provided training for the netplusFR team to ensure smooth operation of the new infrastructure. Gregor Jeker, Principal Network Architect at dualstack AG, draws a positive conclusion.

CONCLUSION

"This project was **an important milestone for us. The collaboration between netplusFR and dualstack AG has shown how complex challenges can be overcome and sustainable improvements achieved through innovative solutions and close cooperation."**

Gregor Jeker,
Principal Network Architekt bei dualstack AG

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