Rosenberger

Modernization and optimization of optical fiber infrastructure

Rosenberger OSI and Modul'Data Center (Gardanne, France) have been supporting NAVER LABS Europe

SUCCESS STORY

NAVER LABS Europe belongs to the Korean company NAVER, Korea's best-known Internet portal (75% of the 'search' market) and leader in the fields of e-commerce, fintech, and Cloud and digital services. It is France's largest private artificial intelligence research center.

In 2018, NAVER purchased premises for its research center, including the château Cartier-Million close to Grenoble in the heart of the Maupertuis estate park in Meylan.

After moving in, NAVER LABS Europe installed an IT container to increase its IT capacity before launching renovation work in the historic buildings in 2019. During this work, it became clear that the fibers that criss-crossed the buildings were coming to the end of their operational life. That is when NAVER LABS Europe decided to replace these fibers and issued a Request for Proposals for this infrastructure modernization project.

After a short selection process involving three candidates, the evolutive capabilities, performance and prices of the proposed solutions emerged as the vital criteria differentiating the bidders. NAVER LABS Europe consequently decided to entrust the project to Modul'Data Center (a subsidiary of IP Energy), a builder of modular datacenters and expert in the installation of Low Current applications which makes use of preassembled solutions from Rosenberger OSI, an acknowledged specialist in the field of optical fiber connectivity, cabling solutions and infrastructure services for datacenters, LANs, mobile networks and industrial applications.

ABOUT NAVER LABS Europe

"NAVERS LABS Europe" has its headquarters near Grenoble, France, and is the country's largest private AI research center. It belongs to the Korean company NAVER, Korea's best-known Internet portal (75% of the 'search' market) and leader in the fields of e-commerce, fintech, and Cloud and digital services.

THE CHALLENGE

In 2018, NAVER purchased its historic premises as its R&D center for Europe. Here, the company installed an IT container before moving on to the task of replacing its fiber infrastructure in order to ensure protection, improve performance and create scope for future expansion.

THE SOLUTION DELIVERED BY

ROSENBERGER OSI

In the form of PreCONNECT® SMAP-G2 HD, Rosenberger OSI proposed a system of highly modular 19" panels with a very low plastic content for the cabling of the datacenters and other buildings.

Enhanced performance and increased scalability

Once the ducts had been installed, Rosenberger OSI and its installation partner Modul'Data Center were able to turn their attention to the implementation of the tailor-made offer that had been developed to meet the needs of NAVER LABS Europe: protection, performance and scalability.

Based on its wealth of experience, Rosenberger OSI offers solutions that anticipate the exponentially growing needs of its clients while also guaranteeing optimum performance in their datacenters.

For this project, MPO technology was therefore recommended by Modul'Data Center: thanks to the use of multifiber connectors, it provides the ideal conditions for the implementation of high-performance data networks in order to ensure enhanced bandwidth and meet potential future needs.

This technology also makes upscaling and migration to Ethernet 40/100 Gigabit network operation easier and more efficient thanks to connectors that have been officially certified for these data rates, namely one of the requirements defined by NAVER LABS Europe.

The technical teams successfully interconnected the various buildings (distances of 50 m to 150m) using preassembled MPO multimode (OM4) optical fiber trunks. These trunks were connected to high-density (HD) cassettes and integrated in PreCONNECT® SMAP-G2 HD panels supplied by Rosenberger OSI.

PreCONNECT® SMAP-G2 High Density (HD) 19" distribution panel

In the form of PreCONNECT® SMAP-G2 HD, Rosenberger OSI proposed a system of highly modular 19” panels with a very low plastic content for the cabling of the datacenters and other buildings.

The front plates of these products are optimized with a density of up to 72 LC Duplex or MTP® ports per height unit. The part front plates (PFP) and MTP® modules can be inserted easily without tools and are fixed in place with clips. The PreCONNECT® square interfaces also make it possible to fix the cable dividers for the trunks without the need for tools.

Depending on the way the PreCONNECT® SMAP-G2 HD panels are used and assembled, numerous back plates are available for cable inlet. The depth of the PreCONNECT® SMAP-G2 HD can be adjusted thanks to the 19" mounting guides and can thus be adapted for different rack configurations.

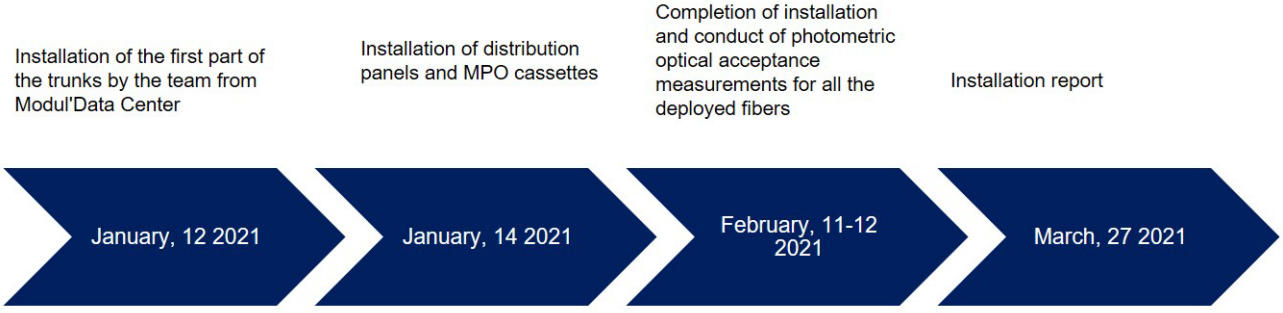
Advantages:

- High port density and space savings
- High level of modularity in the configuration of customized cabling structures
- Optical fiber and copper cables can be installed together in the panels
- Simple, fast installation, addition of trunks and maintenance: just one person is sufficient for installation
- Low thermal load due to minimized use of plastic

Limited on-site time despite the constraints of the premises

Even though the work had to be carried out in historic listed buildings, which made on-site operations a little more complex, the project activities were carried out in two waves and took one month to the day. Rosenberger OSI assisted the technical teams from Modul’Data Center (a subsidiary of IP Energy) during the on-site launch of the work and the successful conduct of the optical tests.

NAVER LABS Europe now has more options available to it for the future thanks to the dynamic solution designed and installed by Rosenberger OSI and Modul’Data Center. The solution is guaranteed for 25 years, a major advantage in this type of large-scale project.



About Rosenberger OSI:

Since 1991, Rosenberger Optical Solutions & Infrastructure (Rosenberger OSI) has been a recognized expert for fiber-based connectivity, cabling solutions and infrastructure services in the areas of data centers, local area networks, mobile networks and industrial applications.

As an integrated solution provider, we have high expertise in the development and operational excellence in the production of system solutions for communication networks. Our comprehensive services enable the secure and efficient operation of digital infrastructures. This combination, combined with our strong customer focus, makes us unique and a strong partner in the global market.

Rosenberger OSI employs around 740 people in Europe and North America and has been part of the globally operating Rosenberger Group since 1998. The Rosenberger Group is a leading global provider of high-frequency, high-voltage and fiber optic connectivity solutions with headquarters in Germany.

Further information is available at: www.rosenberger.com/osi

Rosenberger

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