Read the interview about "high-speed infrastructure in the Classik Business Space"

A conversation with Paul L. Dreykluft (Managing Director of Classik Hotel Collection GmbH, which operates the Classik Business Space) and Oliver Schork (Managing Director of Oliver Schork EDV Service GmbH, the solution provider responsible).

Mr Dreykluft, Mr Schork, together you have impressively modernised the Classik Business Space. Can you briefly explain what makes the project special?

PLD: Our goal was not 'just' to renovate the property, which was constructed in 1995. Instead we wanted to make it more future-proof than many new buildings. Our aim was create infrastructure that gives our tenants a real competitive advantage, today and in 10 years time.

OS: We replaced all the building's cable while it was occupied, without disrupting the tenant's work. Today we can offer up to 600 Gbit/s per floor tank using the current switches, via a scalable fibre-optic system that connects directly to each workstation. And if you need more performance, it's available. Up to 12 fibre pairs, each with a speed of up to 400 Gbit/s, can be installed to each floor tank. However, that requires even higher performing switches.

How did you install such powerful infrastructure to an existing building in continuous use?

OS: We installed the new structure in parallel. The old copper cables were connected to a separate port on our router. Whenever a tenant moved, we seamlessly switched them to the new fibre-optic infrastructure and removed the old cables. That allowed us to modernise the network successively without interrupting operation.

The cabling concept was an important element of the project: we installed Hexatronic Microducts under the raised floor – with 24 duct bundles over long distances, broken down into 12 duct, 7 duct and single microducts to the floor tanks. Microducts are more robust and simpler to install than the optical fibres themselves. Once the ducts were in place, we knew the exact cable lengths, thanks to precise documentation. Then Sachsenkabel manufactured Hexatronic Stingray fibres to the exact length required and installed 12 simplex connectors to one end. That meant there was no need to spice in the rented area. Instead we were able to simply blow the cable through the ducts using compressed air. Splicing only took place in the central distribution, with a total of 3,360 fibres – without disturbing the tenants. PLD: That aspect of the project was critical to our business. With 3,500 m² of office space, almost all of it occupied, we could not afford to disturb our tenants with significant construction work.

What specific opportunities does the new network offer tenants?

OS: Each tenant currently receives a standard 10 Gbit/s connection at their workstation – via PCle card, Thunderbolt adapter, their own router or professional WiFi. If they need more performance, they can upgrade to 100 Gbit/s immediately. And structured fibre-optic distribution even allows us to bundle several 100G links, for applications such as NVMe-over-Fabrics storage or high-performance clusters.

PLD: That means we can serve customers that rent a single office and want a fast internet connection, and others who need a whole floor with 40 workstations and a 100 Gbit/s connection. Where required, we also offer physically separate infrastructure for the highest possible security. In short, we have

appropriate infrastructure for almost any technical vision – immediately and without any construction. And our tenants work in generous, fully-furnished offices.

It sounds like the network uses the kind of technology you would find in a data centre. How were you able to install it economically?

OS: The concept using microducts described above was essential to reducing costs. Almost any other system would have involved emptying the whole building and tearing up the floors. It was important to us not to blindly pour money into the building. We didn't take the easy route: we examined every option, compared approximately 70 fibre-optic standards, and evaluated various cabling concepts and the associated costs. We even carefully considered copper cables such as Cat8. However, we didn't find another future-proof solution, in part due to a lack of sustainability. It makes no sense to choose a system that would need to be replaced in eight years. The final decision to use OS2 fibre-optic infrastructure was very conscious.

What does the future hold?

PLD: We are ready. The need for high-speed connectivity will grow – due to cloud computing, Al and real-time applications. Our tenants at the Classik Business Space can take advantage of those developments without any stress, because they already have the infrastructure.

OS: Exactly. And because we installed a modular system, we can scale it at any time, without disruption. We don't conceive networks for today – we conceive them for tomorrow.