

## CASE STUDY

# EXPERT SUPPORT FOR DATAHUB CUSTOMERS

DataHub AG operates one of Switzerland's most modern and energy-efficient data centres in Winterthur. Datwyler assisted DataHub in the sphere of ICT infrastructure – from consultancy through to implementation.

At the beginning of November 2015 DataHub AG began operating its first data centre in Winterthur. Here a net data centre area of over 1100 square metres is available for businesses to rent. The new colocation data centre provides high-speed access via a geo-redundant fibre optic network. It was built to TIER III standard, some parts even to TIER IV, and is run in compliance with ISO 27001 (Information Security) and ISO 50001 (Energy Management). It is currently certified by SQS and IQ NET.

One of the earliest customers is ZHAW, a leading Swiss University for Applied Sciences, located in Winterthur, Zurich and Wädenswil. In the new data centre those responsible at ZHAW rented two rooms with a total 140 square metres of IT floor space. Around 70% of the area was intended for use in the initial stage, comprising 30 IT racks. The remainder is being held in reserve for subsequent expansion.

### **“Feel-good package” for data centre customers**

ZHAW ordered ready-equipped, fully functioning IT rooms from DataHub. DC-ONE AG took on the planning and construction of the physical infrastructure systems. To address the requirements of the ICT cabling system DC-ONE brought Datwyler on board, a partner with in-depth knowledge and experience in this discipline.

The Datwyler specialists organised two workshops in order to design an appropriate cabling infrastructure for the server IP and the storage network together with ZHAW. All the relevant issues affecting the design of a



high-speed data centre cabling system were dealt with in the workshops. From the results it was then possible to deduce the quantity structure as well as the layout and configuration of the rack types. Last but not least came the creation of a suitable labelling concept.

In this way, even at an early stage, Datwyler provided those in charge of IT with maximum security and transparency. “In the joint workshops our ideas on the cabling solution were put on paper due to the in-depth know-how of the Datwyler specialists concerned, thus providing us with a tailor-made solution”, confirmed Remo Müller, Network Administrator at ZHAW.

In terms of fibre optics the solution selected comprises a “Datwyler Data Centre Solution” and a 10-gigabit-compatible copper system. It gives ZHAW maximum performance and also, owing to its migration capability, a high level of investment protection.



## Over 2000 links in 12 days

The very narrow time frame for the whole infrastructure project posed a special challenge. In the end only 12 working days were available for the installation of the ICT cabling, including acceptance testing and recording results. The high degree of preassembly, however, made it possible to install a total of 2,142 links on time and in the quality specified.

The 1,068 fibre optic connections were made via 51 mini-breakout cables with MTP connectors assembled to a high quality at both ends. They terminate on plug-in modules with LC quads and E-2000/APC adapters on the front panel. OM4 fibres were used for the multimode links, type G.652.D fibres for the single-mode links.

The 1068 copper links between the racks were made using 178 Category 7 type CU 7002 6x4P trunk cables. These were supplied by Datwyler with pre-assembled Category 6<sub>A</sub> RJ45 modules at one end. The open end of the cable was cut to length and wired up as required by the installer on site. Links were also made to test facilities outside the racks.

Swisspro AG (Zurich), an expert partner certified by Datwyler for the installation of the copper cabling and acceptance testing, was also able to take on the basic installation of the fibre optic cabling. The performance-relevant work – inspection, cleaning and inserting the MTP connections – and acceptance testing were taken on by Fiberwork AG (Lucerne), the partner company specially certified for the Datwyler Data Centre Solution.

DataHub AG used the successful project in Winterthur as an opportunity to again secure Datwyler's expertise in planning the next data center, already at an early stage.

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