

案例精选  
REFERENCE PROJECT

# 为DATAHUB客户 提供专家支持 EXPERT SUPPORT FOR DATAHUB CUSTOMERS

DataHub AG在温特图尔运营着瑞士最现代化和节能的数据中心之一。  
德特威勒为DataHub提供了涵盖ICT基础设施领域的  
专业支持——从咨询到实施。

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.



位于Winterthur Töss的DataHub数据中心外景图

External view of the DataHub site in Winterthur Töss

2015年11月初, Data-Hub AG 开始运营其位于温特图尔 (Winterthur) 的第一个数据中心。这是一个面积超过1100平方米, 为企业提供租赁服务的网络数据中心。新的主机托管数据中心通过异地冗余光纤网络提供高速接入。按照III级标准建立, 部分区段甚至达到IV级, 运行符合ISO 27001 (信息安全) 和ISO 50001 (能源管理)。目前通过了SQS和IQNET认证。

At the beginning of November 2015 Data-Hub 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.

**„德特威勒专家为我们提供了量身定制的解决方案“**

Remo Müller, ZHAW

**„THE DATWYLER SPECIALISTS PROVIDED US WITH A TAILOR-MADE SOLUTION“**

Remo Müller, ZHAW

最早的客户之一是瑞士领先的应用科技大学, 在温特图尔、苏黎世和韦登斯维尔均设有校区。在新数据中心, ZHAW的负责人在IT楼层租赁了总面积为140平方米的两个房间。其中70%的面积预期用于初始阶段, 包含30个机架。剩余面积储备用于后续扩展。

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.

**为数据中心客户提供“Feel-good套装”  
“Feel-good package” for data centre customers**

ZHAW订购了来自DataHub的装备完好且功能齐全的IT房间。DC-ONE AG 负责物理基础设施系统的规划和建造。为了满足ICT布线系统的要求, DC-ONE 与在该专业领域内拥有深厚知识和丰富经验的德特威勒进行合作。

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.

德特威勒专家组织了两场研讨会, 旨在为服务器IP和存储网络以及来自ZHAW的负责的IT技术人员设计一款合适的布线基础设施。所有影响高速数据中心布线系统设计的相关问题均在研讨会上得到了圆满解决。从会议的结果中可以推断出潜在的数量结构以及机架类型的布局 and 配置。最后同样重要的是, 创立了一个合适的标签概念。

The Datwyler specialists organised two workshops in order to design an appropriate cabling infrastructure for the server IP and the storage network together with the responsible IT technicians at 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.

按照这种方式, 即使在初期阶段, 德特威勒依然为IT负责人提供了最大的安全性和透明度。“在联合研讨会上, 借助相关德特威勒专家的深厚专业知识, 我们的布线解决方案愿景及其理念已形成了具体的书面理论, 从而为我们提供了量身定制的解决方案, “ZHAW的网络管理员Remo Müller确认说。

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 vision of the cabling solution and our ideas on it 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.

在光纤方面, 选中的解决方案包括一套“德特威勒数据中心解决方案”和一套10GB兼容铜缆系统。它为ZHAW提供了最大化的性能, 并凭借其迁移能力实现了高水平的投资保护。

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.

## 12天内安装超过2000个链路

### Over 2000 links in 12 days

整个基础设施项目的时间框架很紧凑，这带来了特殊的挑战。最后仅有12个工作日用于安装ICT线缆，其中包括验收测试和结果记录。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.

当然，高度的预端接组件确保按照指定的时间和质量完成了2142个链路的安装。利用51根两端预装高质量MTP连接头的迷你分支光缆，实现了1068个光纤连接。它们在插件模块上端接LC四口接头以及前面板上的E-2000/APC适配器。OM4光纤被用于多模链路，而G.652.D类光纤用于单模链路。

The high degree of preassembly, however, made it possible to install a total of 2142 links on time and in the quality specified. The 1068 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.

机架之间利用178条7类CU 7002 6x4P主干光缆建立了1068个铜链路。这些光缆均由德特威勒供应，且一端预装了6<sub>A</sub>类RJ45模块。线缆的空白端由安装人员在现场按要求切割和连线。同时创建了测试机架外设施的链路。

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.



在区域分路器内，6<sub>A</sub>类线缆链路端接于弯角配线架。

In the zone distributors the Category 6<sub>A</sub> links terminate on angled patch panels.



采用德特威勒数据中心解决方案的光纤布线

Fibre optic cabling with the Datwyler Data Centre Solution

Swisspro AG(苏黎世)是获得德特威勒认证的铜缆安装和验收测试的专家合作伙伴，同样还能承接基础的光纤布线安装。性能相关的操作检查、清洁和插入MTP连接-和验收测试均由专为德特威勒数据中心解决方案认证的合作公司Fiberwork AG(卢塞恩)承担。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利用温特图尔的成功项目为契机，再次获得了德特威勒在下一代数据中心(已处于初期阶段)规划方面的专业知识。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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