

SFS 服务公司 高性能通信基础设施 High-performance communication infrastructure for SFS services AG

在新大楼内的布线中，SFS服务公司选用了德特威勒电缆公司行之有效的系统解决方案。新的基础设施不仅提供高数据安全性而且为未来的灵活使用做好了准备。

For cabling in its new building, SFS services AG chose proven system solutions by Daetwyler Cables. The new infrastructure provides high data security and flexibility for the future.

SFS 服务公司是支持 SFS 集团及其营业公司的主要服务公司。由于 SFS 服务公司的快速发展，2007 年夏天，集团决定将 180 多名员工集中到瑞士 Heerbrugg 办公。新大楼留有空间以备 SFS 集团今后的拓展。而建立第二个数据中心，公司旨在扩大存储容量、提高数据安全性以及增强关键业务应用软件的可用性。

大楼于 2009 年 3 月底投入使用。办公区配有用于拨号服务和所有 IT 应用程序的现代而有效的通讯基础设施。网络连接个人电脑、传真机、复印机和打印机。300 千瓦 (kW) 容量的数据中心覆盖几个高可用性存储区域网 (SANs)，面积超过 150 平方米。硬件组件与高速铜缆和光缆相连接。

SFS services AG is a central service company that supports the SFS Group and its operating companies. Because of the rapid growth of SFS services, in summer 2007 the group decided to gather its 180-some employees in Heerbrugg, Switzerland beneath one roof. The new building was also planned to provide space for future growth of the SFS Group. By building a second data centre the company aimed to expand storage capacity, improve data security, and enhance the availability of business-critical applications.

The building was commissioned at the end of March 2009. The office area is equipped with a modern and efficient communication infrastructure for telephony and all IT applications. The network links not only PCs, but also fax machines, copiers, and printers. The data centre, designed for a capacity of 300 kilowatts (kW), houses several high-availability storage area networks (SANs) over 150 square metres. The hardware components are linked with high-speed copper and fibre optic cable.



铜缆和光缆的系统解决方案

SFS 项目组选用德特威勒电缆公司的布线系统用于这两个系统，尤其是采用 uninet® 7702 7 类线缆的 unilan® 模块化解决方案 (MS) 和 MS RJ45 连接器技术。与两个数据中心的连接以及在两个数据中心内的连接都在 optoversal® 光纤电缆中进行。德特威勒电缆公司使用工厂组装的 LC 双芯连接器和两级光纤配线方案在预端接方式中实现这些连接。

SFS 服务公司的项目负责人 Pascal Benz 解释道：“我们的局域网基础设施在底座上只有一个中心配线架，铜缆从中心配电架（底座）穿过辅助竖井直接到达办公区域。这就不再需要地板配线架。这个结构拥有 15 年或更长的使用寿命，比子配线架的替代品花费更少”。

System solutions in copper and optical fibre

The SFS project team chose cabling systems by Daetwyler Cables for both systems, specifically a unilan® Modular Solution (MS) with uninet® 7702 Category 7 cable and MS RJ45 connector technology. Links to and within the two data centres were executed in optoversal® fibre optic cable. Daetwyler Cables delivered these links in a pre-terminated format with factory-assembled LC duplex connectors and a two-stage fibre optic distribution concept.

“Our LAN infrastructure has only one central distribution rack in the basement, from which copper cable runs through service shafts directly to the office areas. This eliminates the need for floor distribution racks”, explains Pascal Benz, Project Head at SFS services AG. Viewed over a service life of 15 years or more, “this structure costs less than an alternative with sub-distribution racks.”

有力的论据

局域网项目组包括电气策划师 Carl Keel、Heerbrugg 工程办公室 Projekt 公司的项目负责人、技术服务小组、IT 主管以及该项目负责人。项目小组最初接收一份包含更多光纤连接的提议，但 Benz 解释说铜缆系统的性能余量很高，足以满足现在的带宽甚至未来发展的需求。“在中心配线架配有光纤，我们可能需要极其大量的连接器，这会使更换跳线出现不必要的困难”。

SFS intec 电力基础设施建设小组负责人 Werner Niederer 谈及之所以选择德特威勒电缆主要是“因为德特威勒电缆公司提供很好的数据安全性、可保障未来比特率与应用程序所用的大容量，且提供 20 年的系统质保期”。该集团之前也用德特威勒电缆公司的系统完成了其它项目，并且对产品的质量 and 项目支持感到非常满意。除了具有竞争力的定价之外，这些都是“简单而有力的论据”。

Strong arguments

The LAN project team comprised the electrical planner Carl Keel, the project leader of the Heerbrugg-based engineering office Projekt AG, the technical service team, the IT head, and the project leader. The team initially received a proposal that included far more fibre optic connections, but Benz explains that the copper system provides such high reserves that it meets the bandwidth demands even including future growth: “With optical fibre in the central distribution racks, we would have had a very dense mass of connectors, which would make changing patch cords unnecessarily difficult.”

Daetwyler Cables solutions were chosen mainly “because they give us great data security, high capacity for future bit rates and applications, as well as a 20-year system guarantee,” says Werner Niederer, team leader for electrical building infrastructure at SFS intec. The group had previously completed other projects with systems by Daetwyler Cables and was well satisfied with the quality of the products and the project support. Besides competitive pricing, these are “simply strong arguments”.



双层光纤配线器
Two-stage fibre optic distributor

安装快速而整洁

Huber+Monsch 集团的 St. Gallen 公司负责安装。至 2009 年 3 月，由 Roger Städler 率领的安装团队已在办公区域安装了约 80 千米铜缆、2400 个 MS 模块和众多光纤连接，在数据中心安装了 500 个铜缆连接，并在铜缆与光缆间安装了许多跳线。为连接光缆，安装团队充分利用德特威勒电缆公司新的配线方案—固定到几个软管上的大芯数光缆，预端接、高密度，每个软管有 4 组 12 芯，配有连接头。该方案可节省空间并有助于有序而快捷的安装。数据中心总策划师及苏黎世基地的 divtech GmbH 公司首席执行官 Armin Gwerder 这样说道：“安装非常精确、非常整洁”。

安装提前完成，Pascal Benz 惊叹道：“看到无数电缆那么快就消失不见了，简直难以置信”。在测量和鉴定所有连接后，有充裕的时间使整个网络投入运行。SFS 服务公司对总成本也很满意。良好的项目管理和有利的市场条件使得整个项目的花费比预算低了五至十个百分点。

Fast and neat installation

The St. Gallen firm Huber+Monsch AG handled the installation. By March 2009 the installation team led by Roger Städler had installed some 80 kilometres of copper cable, 2400 MS modules, numerous fibre optic links in the office area, another 500 copper links in the data centre, and numerous patch cords in copper and fibre optic cable. To connect the fibre optic cables the installation team made full use of the advantages of the new Daetwyler Cables distribution concept – high-fibre-count, pre-harnessed, factory-bundled cables fixed to several tubes, each with four bundles of 12, fitted with distribution heads. This concept saves space and is orderly and swift to install. “The installation was very precise and neat”, says Armin Gwerder, data centre general planner and CEO of the Zurich-based divtech GmbH.

The installation work was completed ahead of schedule, tells Pascal Benz: “It was incredible how fast the sea of cable disappeared”. Once all links were measured and certified, the entire network was enabled in plenty of time for the move. SFS services is also satisfied with the total cost. With good project management and favourable market conditions, the overall project was completed at five to ten percent below budget.

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