

Reference report

German Cancer Research expands its data center with tde's tML[®]-system

Smart cabling for top level medical research



With its more than 3.000 employees, the German Cancer Research Center (DKFZ) in Heidelberg is the largest biomedical research institute in Germany searching for causes, risk factors and forms of diagnosis of the widespread disease of cancer. To maintain the high performance standards of science, the research center relies on the latest IT. With the expansion of its data center the institution trusts the flexible, modular tML[®] cabling system of tde - trans data elektronik GmbH.

The German Cancer Research Center (DKFZ) has been struggling with the widespread disease since 1964. Currently, about 1000 scientists in more than 90 departments and working groups are searching for strategies to prevent cancer and to develop new approaches how to diagnose tumors more accurately and how to treat cancer patients more successfully. Roughly 3.000 employees work in the largest biomedical research center in Germany to tackle the challenges posed by cancer.

Modern science is based on effective information technology

In recent years, information technology has become more and more important for research, not least because the needs of scientists have changed. Bioinformatics projects, for example,

place high demands on data transmission and data storage capacity, in addition more and more amounts of data must be processed by medical devices. For modern medical science efficient IT structures are essential.

The information technology at the German Cancer Research Center is a central operating unit of the research facility. Its duty is to find the best way to use the information technology at the DKFZ, to advise the staff from all departments in the selection of the IT tools for their specific needs in a general context, to implement and operate central IT services and to support individual solutions in design and operation.

This task is achieved on a service-oriented basis. Since all essential strategic and operational functions and tasks at the DKFZ are largely supported by IT, the requirements for the availability and security of the IT systems are high and are sure to increase in the next few years.

Building a defined transfer point

This brings along several challenges. The data cabinets for example are fitted very tightly. To unravel the complex IT infrastructure of the research center, the DKFZ chose a new cabling solution. A cabling system was needed which enables the direct and flexible access to the cabinets thus forming a defined transfer point. The IT experts from DKFZ required a solution which can be mounted on the opposite side of the active server cabinet to save space - preferably without the need of special tools. In addition only components manufactured in Germany were to be used.

Space saving solution preferred

The research center chose the tML[®]-cabling system by tde – trans data elektronik. In many discussions with the experts of tde different approaches were identified and evaluated. Finally, the choice was made in favor of a space-saving system.

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Expansion of the capacities with tML®-system

To further expand the IT capacities, the research institution had enlarged their data center. tde equipped the new cabinets with the tML®-system and integrated both fiber optic cable and copper cable, which guarantee high data transfer rates with the maximum packing density - two important factors regarding a high standard IT infrastructure.

„Our tML® cabling system saves the German Cancer Research Center a lot of space in their data center and prevents cable clutter. Furthermore the integration in the existing infrastructure was achieved in a very short time thanks to the Plug-&-Play installation,” André Engel, CEO of tde – trans data elektronik says.

The complete installation for the data center of the DKFZ was operated by a tde service team. “We offer everything from one source and thereby ensure that the system can be integrated seamlessly into the existing structures,” says André Engel. Furthermore, subsequent and replacement installations can be implemented immediately.