

SUCCESS STORY



FNT Command at the Heidelberg University Data Center

// Improving learning and research through modern IT infrastructure

Universities and research centers invest in the latest IT technologies in order to boost their appeal and support digital transformation of teaching and research activities. To cope with the demands on high-tech infrastructures, a structured management system is essential. Read on to learn why the Heidelberg University Data Center opted for the cloud-based version of FNT Command. You can also discover how it uses efficient deployment methods to provide flawless IT services every single day to students, faculty, and researchers.

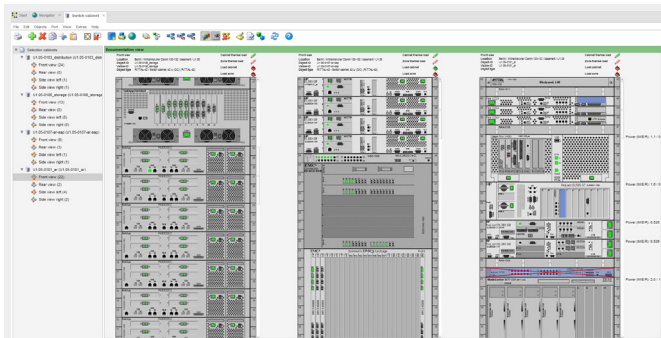
Challenges in IT

A central provider of information and communication technology on campus, the Heidelberg University Data Center ("URZ") maintains a varied portfolio of IT services for students, researchers, and staff. Campus activities are to a large extent dependent on smooth operation of the data center hardware and constant availability of the main servers. To guarantee this service and to resolve faults quickly, the URZ requires accurate and comprehensive documentation of all data center assets. Prior to introduction of FNT Command-as-a-Service, much of

that information was recorded on paper. Whenever components were modified, however, the record became invalid and had to be manually updated. This process became increasingly time-consuming as both the size and complexity of the IT infrastructure grew. Various operational areas within the URZ used additional tools to document assets, e.g., Microsoft Visio and Excel. In the event of a fault, this dispersion of data across a range of formats required extra coordination between the various areas, which also took up valuable time.

Software requirements

With the aim of resolving this situation, the URZ compared a number of database-driven applications in its search for a comprehensive and centralized documentation system for all IT and cable infrastructure. The ultimate goal: to enable seamless collaboration between all employees and accelerate fault resolution. In order to be able to access this documentation in the event of total system failure, the URZ narrowed its search to a cloud-based solution that was hosted externally but also provided in-house backups.



Detailed view of switch cabinet in actual and planned states, enabling seamless collaboration between multiple teams based on a central database

The cloud-based documentation would also have to be accessible from mobile devices, which meant a web-based solution was required. The user interface needed to be simple and intuitive, thereby promoting user acceptance, e.g., by speeding up creation of new hardware assets and enabling detailed documentation of individual components. In addition, the software should enable data resources to be harmonized. This accelerates detection of faulty hardware and significantly improves fault resolution processes. Finally, the vendor should provide reliable support based in Germany.

A smoothly run project

The project began in the fall of 2015, with a number of vendors being evaluated based on a detailed specification. The key functionality for the URZ was the ability to fully document the data center infrastructure so that, in the event of a fault or maintenance, it could easily identify all affected components. It also needed to store configuration data for use in the repair or replacement of faulty devices.

FNT Command-as-a-Service offered a cloud-based solution to all these demands and outclassed its competitors in direct comparison. In addition to its extensive functionality, the most attractive features were its ease of use and the ease of entry into what is a highly scalable system. The evaluation phase was followed by a two-day startup workshop, where a small group of URZ users were introduced to the main features of FNT Command-as-a-Service.

The next step was to begin documenting the server cabinets and cable connections with an FNT system engineer in order to demonstrate the potential of a standardized database. The URZ team then continued with the documentation work, and there was a further workshop for a larger group of users. This provided deeper insights into the software and increased staff acceptance.

The Future

The URZ now plans to expand its collaboration with FNT. In addition to the infrastructure in the main server rooms, the URZ will use FNT Command-as-a-Service to document cable paths and network equipment.



The Heidelberg University Data Center ("URZ") is a central provider of information and communication technology on campus. It maintains a diverse catalog of IT services for students, researchers, and staff. As an IT innovator, the URZ is committed to introducing new and forward-looking technologies. As a result, it often provides valuable support for important research projects.

The URZ sets its own high standards and actively supports projects in the following areas: energy efficiency in IT infrastructure, cloud computing for the development of virtual server concepts, and the provision of premium storage in the petabyte range. In addition, the URZ is continuously optimizing its data backup and communication network resources.