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CUSTOMER
SUCCESS STORY

A Bundesagentur für Arbeit

Efficient planning, roll-out and documentation

FNT Command consolidates the management of Germany's Federal Employment Agency's complex IT infrastructure

Germany's Federal Employment Agency (Bundesagentur für Arbeit) operates one of the largest and most complex corporate IT networks in Europe. Three redundantly designed data centers support the work of 120,000 employees at more than 1,680 locations. Historically, IT hardware, applications and IT infrastructure were mainly managed using Excel lists and Visio drawings, which were to be replaced by a highly functional, centralized IT platform.

They chose FNT Command because this solution can not only record and manage almost all IT and telecommuni-

cations infrastructure components with the associated software and cloud applications, but can also be connected to existing systems via various interfaces. A particular advantage is that data can not only be imported in various ways, but can also be made available very flexibly. In one project, FNT Command is replacing the old IT procurement and inventory management system for the central data center hardware and is being connected to the ERP software to enable greater automation, particularly when it comes to ordering new IT assets directly from the technical planning.

Public authority
Industry

120,000
Employees

about 1,600
Locations

A few years ago, the Federal Employment Agency launched an initiative to consolidate its various data center-related management systems. The aim was to transfer all IT documentation and administration to a vendor-independent system that would not only manage data storage, but also all planning, purchases, and changes in the data center. It should also be possible to easily integrate other IT systems.

COMPREHENSIVE BUT FLEXIBLE SOLUTION

It is important for the Federal Employment Agency to use an IT infrastructure management tool that is able to actually record and manage all systems, hardware and applications and can also be easily adapted to the operating systems and changing requirements. With FNT Command, they found a solution to consolidate data on a central, flexible platform several years ago.

> "The big difference in working with FNT compared to many other software providers is the high degree of flexibility and the willingness to respond to individual customer requirements. FNT's developers are experienced specialists who are always keen to find a good solution."
>
> Jan Paul, Product Manager for FNT at the Federal Employment Agency

During the implementation, the focus was primarily on recording the data center infrastructure. This included all cables, 20,000 servers, IP networks with all associated IP addresses and 13,200 active network components. Finally, the data center-related infrastructure in all branches was also recorded. The client technology (approx. 180,000 workstation PCs, telephones, monitors, printers) is recorded using a different system, but is connected to FNT Command, so that all related and interacting IT components are mapped in the FNT system.

EXCEL AND VISIO REPLACED

Before using FNT Command, the Federal Employment Agency managed the IT in its data centers in Excel and Visio. There was no standardized, centralized, and clear overview. In Visio, for example, only devices were recorded, but no cables. FNT supported the agency in transferring the Visio plans to FNT when Command was initially populated. The Federal Agency had to completely re-inventory the cabling on site in order to sharpen the level of detail in the documentation. For this purpose, the agency's internal IT service provider developed a nomenclature and labeled all cables (more than 50,000 in the data center area). In total, it took one and a half years to complete the initial data acquisition in FNT Command due to the cleansing process. However, the effort was worth it: today, FNT Command is a complete, solid, and central basis for developing and automatically rolling out IT and service processes.

CONTROLLED PLANNING, EXECUTION AND DOCUMENTATION

Following the implementation of FNT Command, the Federal Agency has successively moved all data center-related IT management processes to it. Employees in the data center now plan and manage all IT infrastructure projects and changes in and with FNT Command. Even to the extent that technicians are not granted access to the data center without an elaborated plan. In this way, the Federal Agency ensures that every change is also part of a closed loop of planning, approval, execution, and documentation. By planning technical changes in advance, they can be easily transferred to the actual state directly after implementation in the tool and are immediately documented. This ensures that the database in the central CMDB is always up to date and represents a digital twin of the real data center infrastructure.

> "FNT Command has proven to be extremely adaptable. The tool is able to connect to almost any IT application."
>
> Jan Paul, Product Manager for FNT at the Federal Employment Agency

CONNECTION TO NUMEROUS NEIGHBORING SYSTEMS

The FNT Command Platform is connected to various other systems and data sources in the data centers via 17 interfaces. These include, for example, the virtual machines from VCenter, Oracle Enterprise Manager for WebLogic middleware and the IP management system for the network's IP addresses. FNT Command forms the central CMDB, which can provide information about all technical configuration items (CIs) and, above all, connections. The solution keeps pace with technological development: if new requirements arise, the Federal Agency can simply expand the use of FNT Command. For example, virtual cloud instances are now also managed in the system.

> "The high level of trust and comprehensive knowledge is a major advantage in the collaboration. This enables rapid implementation without major reworking."
>
> Markus Koch, Deputy Product Manager for FNT at the Federal Employment Agency

HIGH AVAILABILITY OPERATION IN PRIVATE CLOUD

FNT Command runs on virtual servers in the Federal Agency's data centers and is used as a live documentation tool. This means that IT staff enter the previously planned changes into the CMDB before implementation.

Quality assurance then adopts the changes as the new actual status. It is therefore essential that FNT Command has a high availability of almost 100%. The Federal Employment Agency ensures this through redundant operation and load balancers.

Every day, around 50 to 100 employees use FNT Command (out of a total of around 1,800 employees at the agency's internal IT service provider). Most of them use the platform purely for information purposes with read-only access.

The agency's internal IT service provider is currently working with FNT to connect Command to the SAP procurement management system so that orders can be executed from IT planning. In order to better consolidate the tool landscape, the previous inventory management tool with SAP connection for data center management will be replaced by FNT Command. The new solution will then also take current stock levels into account and only trigger orders via order management if the items are not in stock or the stock level falls below a certain level. The connection to SAP is bidirectional. When the ordered goods arrive, this information is transferred back to FNT and recorded accordingly (so that planning can be carried out). For example, the maintenance contract with many details of an ordered product can also be viewed in FNT Command.

> "The consolidation of numerous systems relieves the burden on the IT team and enables new procedures through automation. The simple and modern user interfaces also speed up many processes."
> Markus Koch, Deputy Product Manager for FNT at the Federal Employment Agency

Integration with SAP saves staff from having to track ordered goods in different systems and manage items in the warehouse. If there are changes to the planning, this automatically triggers corresponding actions in the other systems without having to be tracked manually. Even order cancellations are possible via a simple dialog in FNT Command without the need to switch to SAP. The integration of the new system went live in July 2023.

ADVANTAGES OF THE NEW SOLUTION

By centralizing IT documentation, many processes that previously had to be carried out manually have been automated. Automated planning eliminates many manual planning activities, such as searching for free ports in racks. This is now done by FNT Command. Although this minimally increases the planning effort in advance of changes, it saves a lot of time on site because no searching or analyzing is required. By converting the processes to live documentation within FNT Command, the number of corrections required has been reduced to almost zero.

Another feature that the Federal Employment Agency finds very helpful is the "Easy Search", which can be used like a search engine to find almost all indexed CIs quickly and easily. This makes it possible to locate any IT device and cable in just a few seconds and retrieve all the relevant information.

By connecting external systems for IT clients and room management in the branch offices, FNT Command can regularly run scripts to find discrepancies in the location of clients and automatically create tickets to update the data.

> "Much of what was previously managed using Visio or Excel can be easily mapped in FNT Command thanks to the versatile modules. This solves the patchwork that quickly arises without a central CMDB."
> Jan Paul, Product Manager for FNT at the Federal Employment Agency

FNT Command is highly accepted by IT staff, not least because it can be flexibly connected to other systems and because many important functions are already fully implemented in the software out of the box. There are a large number of modules that solve many data management problems even in the standard version of FNT Command, for which employees would otherwise have used Excel or set up a database.

One particular advantage is the extensive data exchange options. It is not only possible to transfer data from other systems into FNT Command, but also to expand them flexibly using FNT's standard tools. Data from different sources can logically be merged with no customization required. In addition, FNT Command can share all data with other systems via various protocols. This makes it much easier to connect to adjacent inventory, monitoring or DCIM systems, and is – a functionality that many other systems only support in a rudimentary way.

> "In cases in which we rely on existing systems for documentation, FNT Command can be easily connected via the Rest API. This has enabled us to continuously reduce the number of silo applications."
> Jan Paul, Product Manager for FNT at the Federal Employment Agency

PLANNING AS A CORE FUNCTION

A key reason for the implementation of FNT Command from the point of view of the Federal Employment Agency was and is the comprehensive planning functionality. It makes it possible to develop a desired target state and to elaborate all the necessary steps in a structured and largely automated manner, for example to create instruc-

tions for service providers, generate procurement orders and transfer them to an ERP system. The transfer of the projected target state as the new actual state significantly reduces the work involved in data entry and increases the reliability of the solution.

Overall, the overview and transparency of the entire IT infrastructure at the Federal Agency has improved tremendously, which has greatly accelerated many services. Together with the extensive management functions of FNT Command, this has had a very positive impact on the day-to-day work of the IT team.

FEDERAL EMPLOYMENT AGENCY

With more than 113,000 employees, the Federal Employment Agency is the largest public authority in Germany. It has a wide range of tasks and operates a total of around 1,680 branch offices. In addition to the 600 agency locations, there are also around 300 job centers and 100 family benefits offices. The Federal Employment Agency uses more than 20,000 servers and over 180,000 networked PCs with 100 proprietary software processes for needs-based job searches, job placement, advice, and payment of social benefits.

In 2021, around 38 billion euros were paid in unemployment benefits and basic security benefits and around 48 billion euros in benefits for children. The in-house service provider designs, develops, operates, and manages the IT technologies required for this, taking current legislation into account. For this purpose, the in-house IT service provider relies on agile cloud technologies and modern development methods. The in-house service provider employs 1,800 people and is divided into the areas of system development, IT production and central project management. It operates three data centers that ensure redundant, high-availability operation.

More than 10 years ago, they introduced FNT Command as an IT documentation tool. Since then, FNT has been a partner of the Federal Employment Agency.

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About FNT

FNT GmbH, headquartered in Ellwangen (Jagst), Germany, simplifies the management of highly complex digital infrastructures in companies and public authorities with its FNT Command Platform. With the cloud-enabled "software made in Germany", IT, telecommunications and data center infrastructures can be efficiently recorded as digital twins and documented across all levels from buildings to digital services. The software also offers open interfaces and numerous functions for planning, implementing and automating transformations and changes in an integrated manner. FNT's customers include more than 500 companies and government agencies worldwide, including more than half of the DAX-40 listed corporations. FNT operates offices in several locations in Germany as well as in New York, London, Singapore and Timisoara and has an international partner system with market-leading IT service providers and system integrators.