

SUCCESS STORY



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FNT Command at Kabel BW

// Always well-informed about the cable network

As one of Europe's largest cable network operators, Kabel Baden-Wuerttemberg GmbH & Co. KG (Kabel BW) with headquarters in Heidelberg must manage a comprehensive coaxial and glass fiber network. To retain an overview of such a network, the provider has standardized its tool landscape on a standard solution with central database and decided on Command from FNT-GmbH. "Even from the beginning, Command handled most of our requirements", stated Ulrich Hoffmann, division manager for the network development at Kabel BW, "and FNT very quickly included any required supplementary functions in the standard product."

Initial situation

Every second household in the Baden-Wuerttemberg state of Germany is currently a customer of Kabel BW. Kabel BW serves these 2.4 million customers with a network of approximately 72,000 km of coaxial cable, 10,000 km glass fiber and twenty distributed network centers.

With this infrastructure, the provider supplies its customers not only with triple-play services (100 MBit/s Internet connection with audio and TV services), but also with hundreds of TV programs and radio broadcasts (see "Kabel BW" box). The glass fiber network is fully redundant and therefore very reliable. Previously, Kabel BW deployed various special solutions for control and administrative tasks. The high complexity of the triple-play world threatened to make these too complicated and no longer state-of-the-art. To consolidate its tool landscape, Kabel BW began in 2008 the search for a standard solution with a central database and a Web front-end. "In the future, duplicated data storage should be taboo", reported Ulrich Hoffmann, who, as division manager for network development, is responsible for the 'Network Information System NIS 2.0' project at Kabel BW, "and rather than a custom-development, we required a release-capable standard product."

Selection procedure

NIS 2.0 should support the business processes for nine company divisions – starting with the planning of the network infrastructure and the technical locations, through to the fault correction of the lines – and therefore serve as the central planning, information and documentation system. After the tendering of the project and the detailed product evaluation, Kabel BW decided in September 2008 that FNT Command was the best inventory solution, augmented with the Autodesk Topobase geoinformation system (GIS) for the visualization of the route paths.

"FNT Command convinced us because it is well-scaled, operates Web-based and handles practically all required functional areas, including glass fiber", explained Hoffmann. "Only the coaxial cable support and the interface to the GIS were missing, but there was the immediate readiness to add this to the standard product." The high market penetration of FNT Command allowed Hoffmann to quickly determine that similarly-sized installations were available as reference customers. He more closely investigated the implementation at Fraport AG (Frankfurt Airport). "It was also helpful that FNT, like us, is a mid-sized company, a fact that allows us both to work as equals", stated Hoffmann.

Solution and implementation

NIS 2.0 integrates two high-performance standard applications – FNT Command for the inventory

management and planning, and Autodesk Topobase as GIS – to provide a shared, combined user interface. This gives users immediate access to all the operational and planning processes of Kabel BW. The following FNT Command functions are deployed:

- > Tray Management for the assignment of ducts and cables to trays, and the assignment of devices (network elements, remote powering devices, etc.) to nodes (see Fig. 1)
- > Junction Box for the management of junction boxes (FIST and connect-through junction boxes) (see Fig. 2)
- > Netspider for the schematic representation of the main and branch cable network as well as for the representation and planning of the remote feed areas (see Fig. 3)
- > Connection and signal trace for the management of the main and connection cable network

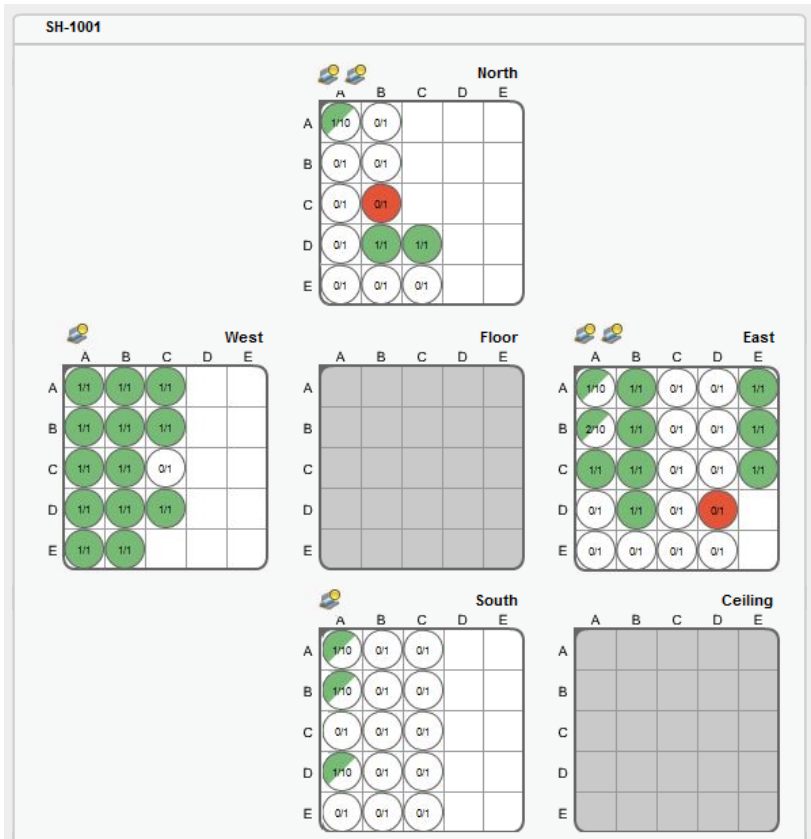


Fig. 1 Tray Management

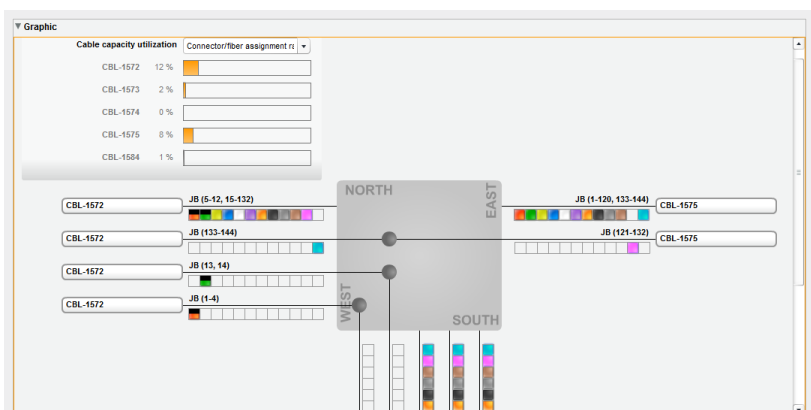


Fig. 2 Shaft representation

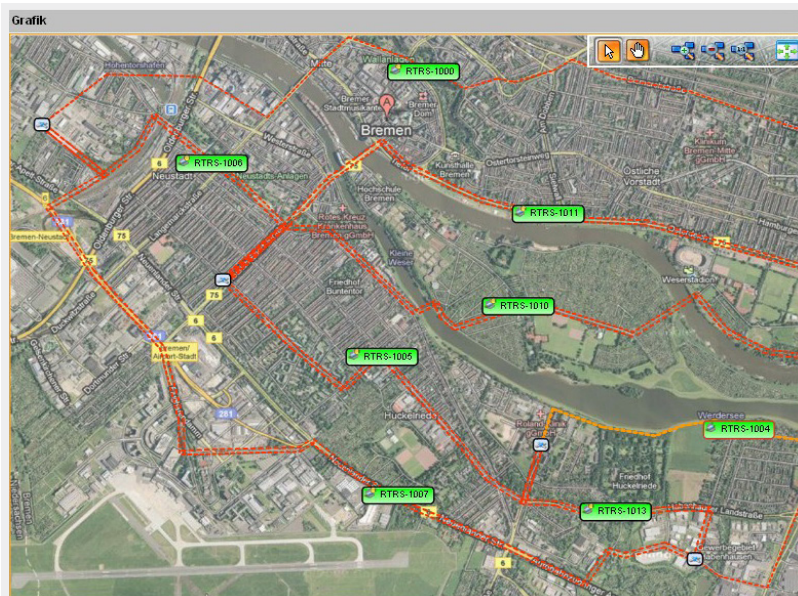


Fig. 3 Graphical netspider

-> Reporting functionality for the flexible creation of queries

During the course of the project, FNT extended the standard function scope with the requirements of the cable network operating company: For example, Tray Management can be used to create shaft maps and so visualize cables, trays or network elements, whereas Junction Box provides very comprehensive junction box management that graphically shows how the individual fibers are looped through. The planning of the coaxial network serves for the level and remote feed calculations as well as providing a schematic netspider. The additions to the solution with regard to signal paths and services required modifications to the data model and the object data masks. Kabel BW now possesses management of the changes in the fixed assets with asset reports and material lists. The inventory data from the FNT Command database can be used via the interface to Autodesk Topobase to visualize route paths and network assignments. "Considering the fact that this was a very complex requirement, this integration has functioned surprisingly well", praised Hoffmann. "We are very satisfied with this solution." Hoffmann was pleased not only with the speed of the product development but also with the tight schedule in which the complete project was implemented: "FNT and Autodesk managed this within one and a half years", stated Hoffmann, "whereas the competitor had planned two and a half years in the tender." This allowed the project phase to be completed in the fall of 2009 with the system going productive in May 2010. "FNT always supported us with its excellent cooperation", praised the Kabel BW project manager. "Our first impression of a reliable partner was confirmed during the project."

Benefits

The main advantage of FNT Command for Ulrich Hoffmann is its uniform data platform: "The central database that contains all the technical information allows both the planning as well as the documentation of the passive and active infrastructure", he explained. "This is an enormous advantage compared with

plans that just lie in the cupboard. We can now represent coaxial and glass fiber networks and also add important supplementary information, such as that for leased carrier lines."

Kabel BW is now able to quickly represent complete processes starting with planning through to the acceptance of a network section or a new technical site. This means in addition to the improved economics and a better overview of the cable network operation, significantly faster workflows for many daily tasks: "Our field service technicians can now access information much quicker and ensure a faster fault correction", added Hoffmann, "and all this from the same system and, in particular, even when they are not in the office." In addition to the consistent database orientation, FNT Command also offers multi-tenant capability and role-based access authorizations.

Kabel BW uses this role model that also includes external users in addition to its own users; such users work as tenants directly on the system: "Service providers in Romania and Serbia are currently importing data into the system", Hoffmann explained. "It is advantageous here that FNT Command is not a desktop solution but rather a high-performance Web application."

Summary and outlook

"The project has proved: FNT to be both a reliable and competent partner and FNT Command to be a modern, well-scalable inventory system with complete coverage of our requirements", said Ulrich Hoffmann from Kabel BW summarizing his experience. "We have certainly chosen the right system and the right partner." Hoffmann is currently working on extending the operational area of the solution: "In the future, we want, for example, to evaluate information from FNT Command about the power consumption and the climate control of the racks and network centers", stated Hoffmann. "In our dynamic market, it is certain that new requirements will arise but which are contained in our base system."



Ulrich Hoffmann, Head of Network
Development at Kabel BW

“FNT is both a reliable and competent partner,
and Command is a modern, well-scalable
inventory system with complete coverage of our
requirements.”

Kabel BW

Kabel BW is the fastest growing, innovative provider for fast Internet, telephone and TV (triple play) services in Baden-Wuerttemberg. With 2.4 million customers, Kabel BW is now one of the largest cable network operators in Europe and is present in every second household in Baden-Wuerttemberg. Kabel BW offers attractive packages with an excellent price-performance ratio and the highest Internet bandwidths (up to 100 Mbit/s) and telephone flatrate. Furthermore, Kabel BW customers can now receive as many as 400 TV programs (also HDTV) as well as 150 radio channels in analog and digital form. Kabel BW also offers with “Kabel BW Videothek” a video-on-demand service for films. Further information: www.kabelbw.de.

FNT Software

FNT is a leading provider of integrated software solutions for IT management, data center infrastructure management and telecommunication infrastructure management worldwide. With headquarters in Ellwangen / Germany, FNT's innovative software suite FNT Command is used worldwide as an OSS / IT management application for communications service providers, enterprises and governmental organizations by more than 25,000 users since 1994. FNT's customer base includes with more than 500 customers in a wide range of well-known organizations working in various sectors, such as the automotive industry, banks, insurance, chemicals, energy management, airports, clinics, media, industry, telecommunications and IT service providers as well as public institutions. Almost half of Germany's DAX30 listed companies are part of the customer base. FNT operates internationally and has subsidiaries in the United States (Parsippany, New Jersey), Singapore, Dubai (UAE) and Russia (Moscow). FNT cooperates in close partnerships with well-known IT service providers and system integrators worldwide.

Further information: www.fntsoftware.com