SUCCESS STORY

FNT Command at electric utility provider NetCom BW

// End-to-end transparency across the entire commnunications network

NetCom BW possesses the second-largest fibre-optic network in Baden-Württemberg, which is primarily used for controlling the electricity network. In recent years, the company started a new business model by pooling its telecommunications activities in order to refinance network expansions and to bring high-speed internet to all remaining areas of the country. As a first step, they have choosen FNT's software to get in control of their existing mission-critical network and optimize operations.

The Challenge

The client faced the costly challenge of managing a complex heterogeneous network with a wide variety of technologies such as WDM, PDH, SDH, MPLS with different vendors. Network expansions and outages were difficult to manage and even more difficult to plan due to the absence of continuous multi-vendor and multi-technology documentation of the passive cable infrastructure, as well as the complete transport network in regards to physical components, logical resources and services of the network. Essential information stored in different systems increased the need for a central database. As a result, costly and time-consuming processes appeared to slow down the flexibility and agility of network operations.

"Since the moment we knew that our biggest challenge wasn't the management of our communications network itself but the processes we applied to it, we decided to implement FNT Command as our central information platform for all service, business, and operation processes," explained NetCom BW's project manager. "With this software, we were able to standardize the management of all network resources, increase the quality of planning processes for passive and active network infrastructure expansions, and manage maintenance windows dramatically to achieve a faster, more direct impact analysis during outages."

Initial Phase for Full Implementation

At the beginning of implementing FNT Command, the customer first merged present documentation of different systems partly via standard import forms. That was the moment when the real potential of the centralized data base became visible, as they gained new insights of their data and its quality. In the second phase of implementation, the client started a standardization of all pre-existing systems with the target to reduce the number of operating systems to manage assets and resources.
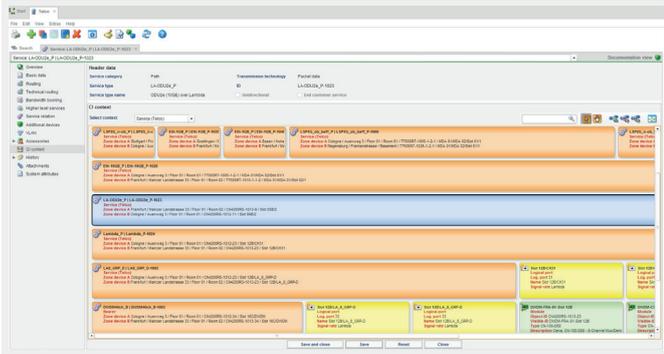
Graphical views of logical layers and service hierarchies helped network operators of NetCom BW to achieve end-to-end transparency in their multi-vendor network.

When proper processes for planning, documenting and managing the communications network were in place, the utility provider focused on optimizing their process for maintenance window planning to support network expansions and better administrate known outages without risking customer satisfaction.

Crucial Optimizations for Network Operations

Based on the comprehensive data model of the central operation system, FNT Command, they were now able to identify all of the services and customers that are dependent on a cable connection or running over a specific card or node. This process usually took about three days per case, as the required information was stored in different systems and had to be collected then accurately checked.

> „Implementing a centralized network and service resource database with extensive analytics and reporting capabilities was our key to success."

With FNT Command, the user is now able to directly create a complete query of all services and their related business relevant data, e.g. whether a spare route is already available for a specific connection. With this feature and aligned process, the utility provider achieved the highest quality and efficiency while planning maintenance windows with automatic what-if analysis incl. redundancy view.

Additionally, directly out of FNT Command, e-mails can be generated to inform the business customers about planned outages or to inform other departments to reroute connections for specific services.

The coherent data hub for all cable and service resources in the entire network made it possible to cut down the process time to less than one hour, which in fact, is a significant reduction of 95 percent. The new structured planning process enables the utility provider to efficiently manage preventive maintenance tasks, while the FNT Command capability prevents costly outages as staff in the network operation center is able to immediately identify the services and customers affected by an outage and react accordingly to avoid SLA breaches.

"A centralized network and service resource database with extensive analytics and reporting capabilities is the key to success for us, as we are now able to improve operations and increase flexibility throughout the value chain," said the project manager. "Looking back to the very beginning of our project, I am happy that we started this project in time to be ready for upcoming technological and operational challenges. Every time I talk to executive managers of other utilities, I recommend them to start implementing FNT Command now instead of waiting."

In order to transform a network by introducing new technologies and new suppliers, it is important to have full transparency of all current resources across all technologies and layers. Digitization will lead to an increased demand for technological changes and enhancements. It's time to be prepared for the digitization challenge.

NetCom BW

NetCom BW is a subsidiary of EnBW, the third-largest utility provider in Germany. The electric utility provider operates one of the largest wide area networks in its segment with a focus on working closely with communities. The company manages more than 6,200 miles of fiber-optic cables at about 1,500 locations. This infrastructure is used to control self-owned energy and gas networks. Additionally, they offer communication services for residential customers, carriers (large bandwidths up to 10 Gbit/s), and business customers (data center interconnections with high redundancy requirements) based on the company's owned data and voice network.