Efficient and Flexible Network Design for a New Services Age
The Modular Software for all Planning and Optimization Tasks
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The road to the customer goes through the infrastructure! Rising bandwidths, greater mobility, faster service, and a steady decline in prices per transmitted bit – these summarize the demands of communications services on today’s network access. If companies, especially network operators, are to meet these demands they will have to make massive investments in their infrastructure. Infrastructure is only a part of the response to these demands, equally important is the application of innovation in the design and use of the infrastructure.

Responding faster and with more flexibility despite increasing complexity is a daunting challenge for any provider. Ultimately, more and more users will want to have comparable services wherever they physically are. This results in the need to integrate a wide range of technology families into the service providing network. But competitive pressures demand that networks are operated at substantially lower levels of operating cost, and that future expenses are minimized.

These factors combine to make the planning and design of the future telecommunications networks a more demanding and complex challenge than ever before. Moreover, the specific characteristics of the existing network must be considered to ensure that the new solution satisfies all of the commercial framework conditions as well as the requirements of new services, customers, and business strategies. Even today, the standard design methods result in expenditures of time, effort, and money which are simply unacceptable. If companies are to survive the competitive struggle they will have to address these tasks within a significantly shorter time frame and with an increased efficiency.

The NetWorks tool-suite enables you to plan and optimize your network infrastructure, resulting in a high-quality flexible design and architecture which is tailored to meet your requirements – whilst keeping expenditures of time and resources to a minimum.

You never lose sight of the overall picture. With just a few mouse clicks you can analyze the line capacities and bottlenecks in your current network. Until you have ready access to such detail you will not be able to cost effectively, or time efficiently, plan your future network. Despite the complexity, diversity and volume of the relationships within a network, NetWorks enables you to rapidly examine different network scenarios. Furthermore, the ability to integrate configuration files from leading manufacturers allows NetWorks to rapidly and precisely plan all the way down to the system and port levels. These abilities are available for different network topologies as well as various services and traffic pattern. By using NetWorks the expansion of a network is no longer simply based on measurements of the traffic load and performance, but instead looks forward to determine the traffic flows and properties which will be necessary in the future to implement your business strategies.

Our clients confirm this: a large number of international players in the telecoms market have been using NetWorks successfully for more than 20 years. Network operators and system manufacturers alike appreciate the extremely flexible and user-friendly software since it gives them the capacity to plan and optimize a broad range of telecommunications networks. NetWorks offers an outstanding cost-benefit ratio through its ability to be rapidly customized for a given client’s network. Our network planning specialists have successfully carried out hundreds of planning projects, and are constantly feeding their experience back in to the development of NetWorks. Thanks to their unceasing efforts, the software not only analyzes what is technically feasible, but also subjects every draft of a possible network to a cost effectiveness calculation. Thus network investment and expansion plans are supported by a solid commercial foundation so that your business models gain immeasurably in security.
Visual Analyses for all scenarios – Transparency and speed guaranteed

Navigation through the data of your network becomes simple and secure thanks to NetWORKS easy-to-use interactive graphic user interface. Graphic windows and information tables can be individually presented as either geographic maps or as schematic views. Actions such as zooming in on details, filtering network objects, or calculating capacities can all be carried out manually and interactively with only a few mouse clicks or automated via a macro. No matter what you decide to do, the consistency of the data is guaranteed.

Efficient Planning, Optimal Network Design – You benefit in a number of ways with NetWORKS

NetWORKS brings multiple benefits to your organization.

**You will be able to ...**

**... Reduce costs:** Reduce your investment and operating costs significantly by calculating the most favorable traffic paths and optimal transmission capacities across all layers of the network. This is assured by the application of the most appropriate dimensioning methods and consideration of the specific properties of the target service.

**... Master complexity:** Create transparency by merging traffic data from a wide range of sources into a standard, yet flexible model and data management system which enables you to analyze and then visualize your results in customized software tools and interactive graphic maps and tables.

**... Increase efficiency:** Accelerate decision-making processes by using a tool-based comparison to check the complex dependencies in various network scenarios, thus reducing the manual effort and likelihood of error.

**... Create innovation:** Construct networks which are simultaneously both high-performance and reliable. NetWORKS considers all of the mechanisms for calculating the resulting loads and required capacities. NetWORKS has service-related performance and quality assessment algorithms that analyze risks and that propose suitable counter-measures.

**... Anticipate what the future will bring:** Realize new business models, pro-actively plan for the network quality and capacity which will be required by the revenue bringing services of tomorrow instead of having to react to the bottle-necks in the high occupancy circuits of today.
The Modular Software for all Planning and Optimization Tasks

Irrespective of whether you want to expand your fixed network capacities, consolidate mobile networks, or undertake the migration to an all-IP network (NGN), NETWORKS can provide valuable support.

The software tools of the NETWORKS family support the analysis, planning, and optimization of networks using:
- 2G, 3G, and 4G wireless technologies such as GSM, GPRS, UMTS, WiMAX, HSPA for the fixed network components
- TDM and WDM transport technologies (SDH, DWDM)
- Packet-based technologies (IP, MPLS, ATM, Ethernet)
- Modern access technologies (PON, DSL, Ethernet)

NETWORKS enables the planner to address the provision of services on conventional and latest technology based platforms.

We are there to support you during your day-to-day work with NETWORKS.
You will also receive with NETWORKS:
- Comprehensive manuals
- Online help for frequently required user functions
- Help Desk support via telephone and e-mail
- User courses in English and German
- Workshops and coaching for advanced training
- Care and maintenance services

Detecion International GmbH
Detecion is one of the world's leading consulting companies for integrated management and technology consulting. Founded in 1977, Detecion offers consulting services to the telecommunications industry around the world. In view of the growing importance of IT and TC technologies in areas far beyond the narrow confines of actual telecommunications, we have taken this expertise as our starting point to offer consulting services to clients from virtually all industries. Our services focus on consulting and implementation solutions which are derived from the use of information and communications technology (ICT). Detecion's know-how is based on an in-depth understanding of markets, technologies, and business processes tried and proven in actual practice and bundles the knowledge from successfully carrying out management and ICT consulting projects in more than 100 countries.