Optical network design & construction support tool NETPlanners Portal



NNETvisor

OPTICAL NETWORK DESIGN & CONSTRUCTION SUPPORT TOOL



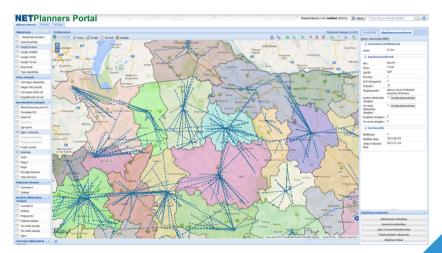
NETPlanners Portal

FOR TELECOMMUNICATION SERVICE PROVIDERS AND INVESTORS

With the significant advantages of fiber-optic communication, almost all new telecommunication backbone networks are based on fiber-optic systems. In order to make this network opportunity with all its advanced services available to everyone and offer virtually unlimited bandwidth to users, vast improvements are needed in access and aggregation networks. The ultimate long-term solution lies in end-to-end optical fiber connection to the end-users and the mobile base stations.

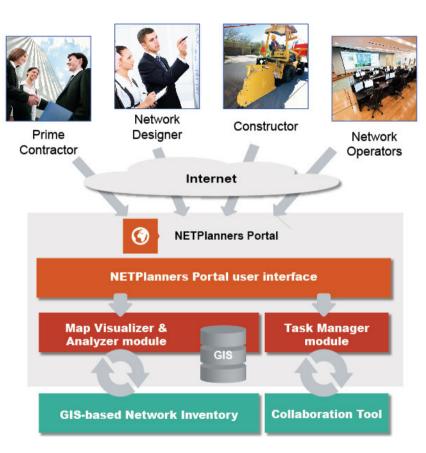
Concerning the smaller and larger regions and settlements, the implementation of fiber-optic access and aggregation networks are cost-intensive investments and several preconditions must be met. During the preparation of the planning, the detailed design and the construction a number of business and technical decisions must be taken. NETvisor's NETPlanners Portal supports the general contractor, the designers and the constructors in every phase of this complex work.

Ensured through the use of NETPlanners Portal, network plans can directly be used as inventory data, saving the costs of creating the inventory database and all network management advantages will be accessible by using an object oriented GISbased network inventory.



Benefits of using NETPlanners Portal

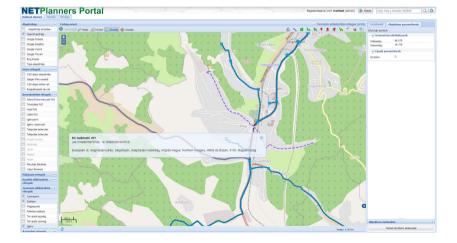
- During the design and construction project all relevant participants have simultaneous and simple access to data via the web-based portal
- The application allows the swift creation, modification and analysis of version-managed theoretical networks and surveyed commercial and planning data for the decision makers and designers
- Continuous tracking of planning and construction tasks
- Real-time tracking of individual work-groups gives the ability to recognize delays, deviations from signed contracts early in time
- Delivery for the client and supporting the communication with the project participants can be faster and more efficient
- From design to final documentation data are stored in database containing GIS data and attributes of objects allowing query, processing and visualization from a number of aspects.
- GIS-based foundations of NETPlanners Portal provide full interoperability with GIS-based inventory systems that is essential for state of the art operations
- A clear and intuitive user interface provides easy to learn use of NETPlanners Portal



NETPlanners Portal supports the general contractor, the designers and the constructors

NETPlanners Portal supports the following tasks

- Technical, economic and commercial preparation of fiberoptic network design
- Support for managing the construction project with scheduling and GIS data
- Tracking the project phases from planning to operation
- Providing fundamental GIS-based data for the participants of detailed construction planning and construction
- Creating the GIS-based inventory system
- Making spectacular and interactive demonstrations





NETPlanners Portal supports the following tasks

NETPlanners Portal is a centralized thin client application that **helps transparently performing commercial, survey, design and construction tasks** in telecommunication network development projects regardless of the project size and number of participants. In large-scale investment projects, the transparency of the processes, visibility of the participants, the geographic data & information and the progress is essential for the success or the project and for the compliance with the planned schedule.

With its intuitive clean user interface and attractive visualization capabilities, NETPlanners Portal provides benefits for all participants, and vastly increases efficiency for the individuals and for the project as a whole.

Beyond its commercial and design support capabilities, NETPlanners Portal is a collaboration tool with its JIRA integration. It also visualizes the project schedule and tracks the progression on map. Its purity and visualization options make it highly applicable it as a demonstration tool for commercial and other purposes as well.

With its built-in topology set of rules and route-planning options, NETPlanners Portal can also very efficiently be used for along the route (public road, rail, private road) strategic planning.

The data-structure that is implemented in NETPlanners Portal with

its different data-sets and their cross-references and hierarchy ensures full transparency in the system. Work done within the portal thus guarantees the integrity of the existing data. Part of the sales / marketing support is defining a path (optical fiber, bandwidth) in accordance with the commercial needs, where the actual paths and the demands appearing on the paths can be handled separately thus **enabling flexibility in respect** of post-editing of paths and modifiability and scalability of demand list.

To support the draft and detailed network design, a separate AutoCAD plug-in set is provided that ensures the **interoperability between NETPlanners Portal**, **AutoCAD** (which is widely used for design and authorization planning in the common practice) and other geospatial systems.

With its built-in set of rules, the AutoCAD plug-in defines the additionally stored datasets (equipment and technologies used) ensuring the unified form and structure of documents from different designers and usage of the prescribed technologies for the network to be built.

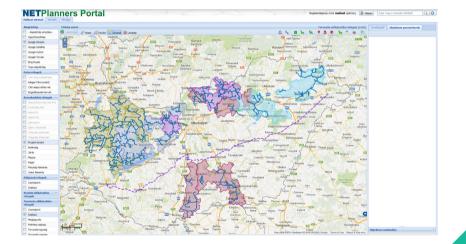
By enforcing in a user-friendly way to enter the attributes assigned to the drawing set (by using drop-down item sets and forms), the design work is made more efficient.

OPTICAL NETWORK DESIGN & CONSTRUCTION SUPPORT TOOL

Functionality list

- Support of different roles and authority levels
- CAS-based single sign-on authentication
- Customization of visualization (display, coloring, subtitling, layer ordering and filtering)
- Network design with enforced/automatized topology regularities and editable network plans with version tracking
- Manual recording of new data and bulk loading options, with the modifiability options of existing data and the geometry of objects
- Arbitrarily extended layer structure (from both vector and raster sources) performing detailed commercial and design functions
- Applicability of known and potentially available base map sources
- Object and address search options and routing support
- Attribute -based and spatial filtering, query support
- Collectability and reporting topological connectivity, object references, and other relationships
- Provide data transformation options for interoperability with external systems
- Support for standard protocols for accessing different data sources
- Implemented integration with a collaborative system (JIRA) in order to track project scheduling, supported by visualization on NETPlanners Portal
- Integration with GE Smallworld Physical Network Inventory

■ AutoCAD plug-in set for unifying AutoCAD design and



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PERFORM

COMMERCIAL, SURVEY, DESIGN AND CONSTRUCTION TASKS IN TELECOMMUNICATION NETWORK DEVELOPMENT PROJECTS REGARDLESS OF THE PROJECT SIZE AND NUMBER OF PARTICIPANTS.

Collaborati

EFFICIENTLY WITH ALL PARTICIPANS OF THE PROJECT: THE PRIME CONTRACTOR, THE NETWORK DESIGNER, THE CONSTRUCTOR AND NETWORK OPERATOR.

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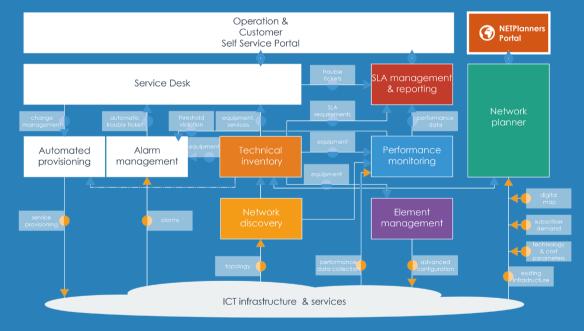
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VISUALIZE

THE PROJECT SCHEDULE AND TRACK THE PROGRESSION ON A MAP.

NETPLANNERS PORTAL

IN AN OPERATIONS SUPPORT SOLUTION



NNETvisor

improving the quality & efficiency of ICT services

NETvisor Ltd.

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