Overview

Due to the ever increasing expansion of broadband networks and the resulting set up of FTTx infrastructures, network providers are increasingly faced with additional reasons to adopt a modern and powerful planning, management and documentation system.

ConnectMaster® Rapid Network Planner was developed based on these new requirements and automates the entire process, from rough planning to the preparation of construction documents and work orders, including detailed specifications of costs for individual building projects.

The combined GIS and intuitive user interface optimises the customer’s workflow, wherein all relevant network objects (ducts, micro-ducts, splice-enclosures, cables, fibres, etc.) are taken into account.

Flexible area of application

With ConnectMaster® Rapid Network Planner it is possible to plan the entire infrastructure, from backbone to building connection for all possible variants of an FTTx network. At the same time, the software supports both P2P and PON technologies.

Additionally, comprehensive functions are offered to manage all types and structures of ducts and duct subsystems, including micro-ducts and man-holes. The integrated cable and fibre management system automatically generates all end-to-end fibre connections and interconnections within the relevant ducts and sub-ducts. In the process, splice enclosures and cassettes and the connectivity of the cables at the junctions will be considered and automatically created within the system.

Save time, money and resources with the leading software for automated FTTx Planning and Documentation.
Engineering support
ConnectMaster® Rapid Network Planner offers comprehensive engineering support. Thus the necessary infrastructure components (pipes, shafts, cables, sleeves, etc.) are automatically dimensioned and/or selected based on user-defined criteria and dependencies. The user only needs to select the route and the required customer and/or building connections on the GIS user interface. The entire FTTx infrastructure of the selected region is subsequently created automatically in the system. In the process, ConnectMaster® Rapid Network Planner can automatically model the FTTx infrastructure for an area of several thousand customers within only a few minutes, which makes it possible to realise massive time savings as compared to traditional methods.

Evaluations and reporting
Based on the FTTx infrastructure generated in one region, the associated reports and documents are generated at the push of a button. This includes work orders for the installers like building instructions and splice plans as well as material and parts lists including cost specifications. Besides these basic functionalities, the software also offers comprehensive functionalities to evaluate the degree of utilisation of routes, cables or available splice capacity of joints as well as free / used cabinet slots. The reports can be independently expanded thanks to integrated filter and report components.

Integrated GIS standard
A major component of ConnectMaster® Rapid Network Planner is the integrated Geographic Information System MapInfo® from Pitney Bowes Business Insight. Through the integration of this worldwide leading Location Intelligence solution, all major GIS functionalities necessary for comprehensive FTTx network planning are available within one tool. Because MapInfo® also supports all common international GIS standards, the data exchange of GIS plans and information from inventory data systems can be realised easily.

Network operations
ConnectMaster® Rapid Network Planner also offers many advantages to the user in running network operation. Thus the software can also illustrate the logical level with all active devices and technical transmission structures. This makes it possible to manage existing services and their relationship to the physical infrastructure integrated into one system. Within the context of troubleshooting, the system can identify immediately which services and customer connections run on which end-to-end fibre connection. Thus the software also supports major requirements in the sphere of fault management and offers functionality that includes:

- **Impact Analysis**
  Determines which services and/or customer connections are disrupted when a specific cable or network element fails

- **Fault Localisation**
  "Fault on Map" function for the calculation and display of the fibre breaking point on the GIS map based on OTDR measurement

Open system / interfaces
ConnectMaster® Rapid Network Planner was developed with state-of-the-art software technology, supports common software and system standards and, as an open system, provides interfaces to other OSS systems. Examples are:

- Provisioning Systems
- Fault Management Systems
- Billing Systems
- Network Management Systems
- GIS-Systems

Benefits
Due to the high degree of automation of the FTTx planning tasks, ConnectMaster® Rapid Network Planner enables massive time savings as early as the planning stage, which ensures that investments in the software are amortised within a short time. More than 150 customers worldwide rely on the practical and future orientated ConnectMaster®solution.

ConnectMaster® is a market-leading standard software platform for the planning, management and documentation of telecommunication networks and infrastructure. Its primary advantage lies in the integrated management of the physical and logical network level within one solution.