ConnectMaster™
Network Resource Management

Get the full picture about your network and infrastructure.

ConnectMaster™ is an off-the-shelf, scalable and open software solution for the comprehensive design and management of telecom networks and inventory with seamless integrated geo-spatial location intelligence. ConnectMaster™ supports key business tasks for both domains – physical inventory management and logical resource management within one integrated product.

Overview

ConnectMaster™ is a comprehensive Location and Service Aware Network Inventory and Resource Management Platform. The tool provides an integrated Telecommunications inventory management system with seamless integration between the GIS, the physical and logical layer within one product.

ConnectMaster™ is designed to meet the requirements of Communications Service Providers (CSP’s) and Infrastructure Service Providers (ISP’s) to manage its network and services. It supports all communication technologies such as analog, SDH, SONET, PDH, WDM, Ethernet Services / IP and serves the needs of a vast variety of CSPs and ISP’s for example Fiber Network Providers such as BT, Victrax, Metrofibre and Globalconnect; broadband carriers such as Nextgen Networks and Vodacom; infrastructure service providers such as ESB Telecom, e-net and Swissrail RnR. With about 150 customers worldwide ConnectMaster™ is a leader in this area.

Easy-to-use intuitive User Interface
Get control of your network on a port/fiber level

- Design Inside (ISP) and Outside Plant (OSP) projects
- Draw your cabinets and equipment allocation automatically
- Display network architecture on-demand network
- GEO-schematics Design more effectively with location intelligence capabilities of MapInfo
- Enhance network analysis and visualization
- Maximize network resources to achieve operational efficiency
- Generate multiple types of graphical representations
- Search a network route based on predefined criteria
- Modeling of equipment including multiplexors, cards, ports and services
- Maximum benefit through an integrated approach

ConnectMaster® gives you everything you need to geospatially manage your network, from planning to ongoing management. It provides you with:

- Intelligent, GIS-Based Data Modeling, whose individual map features have built-in relationship and behavior intelligence - matching real-world conditions. You can overlay and query complex network data on a land base, access property records, display street and other infrastructure information, and view aerial photography of any service area.

- Network Documentation, for better data flowthrough and improved operational efficiency. Critical network data is documented and geographically linked, giving you an accurate map of the physical network (including both inside and outside plant facilities). This data is immediately available to procurement, provisioning, service assurance, fault management, and workforce management systems.

- Network Planning and Management, which utilizes accurate views of network resources, allowing you to fully comprehend your physical network. Through attribute, spatial, or thematic queries, network planners can visualize existing capacity and available bandwidth, better manage network growth, analyze demographics, and locate customers and/or equipment. With both upstream and downstream network traces, network planners can identify the total network length, attenuation loss, fault location, as well as all the connected facilities along the path of a network. It all adds up to more comprehensive, timely, and accurate network information and analysis, which in turn allows you to better manage your network and improve customer service.

- Network Design, which supports network engineering capacity expansion projects for both inside and outside plant equipment. Powerful network design features include a standardized telecommunications data model, intelligent design and placement features, model building tools for the creation of network models, map production, and work order processing capabilities.

ConnectMaster® provides users with an easy to use view of the physical network for both Inside Plant (ISP) equipment and connections, including building floor plan, rack, and chassis views, and Outside Plant (OSP), including structures as ducts, chambers, fiber and copper cables, and active and passive equipment in a geospatial context. This intelligent, fully customizable software makes it easy to document and design ISP and OSP facilities to support network planning, construction, and maintenance.

For schematic representation of data, the graphical tool Visio (Microsoft) is embedded into ConnectMaster®. This gives the user the possibility of drawing different elements composing schematic networks, or asking the system to generate automatically the drawings. ConnectMaster® provides a comprehensive view of physical asset placement and connectivity.

ConnectMaster® represents a powerful extension of the location intelligence platform MapInfo, providing tools to create, store and manage an end-to-end model of all network elements. Within a graphical environment, ConnectMaster® displays the model against detailed, land-based features and customer information.

ConnectMaster® is optimized from a data and functional perspective to support key business tasks within its specified domain – physical inventory management and engineering planning and design support and logical/service resource...
Profit from full-featured, service-oriented Resource Management

Showing end-to-end network connectivity and equipment utilization

Configure the transitions, status, and overall workflow within the work

Draw your cabinets and equipment allocation automatically

Design Inside (ISP) and Outside Plant (OSP) projects

Get the full picture with a combined physical/logics Routing Table

Create Documentation automatically

Provide an end-to-end view of logical circuits through all hierarchies

Use the powerful search functions and get the time critical inventory data just “by one click”

management, capacity and service design and assignment.

The user is able to request a detailed inventory report based on location, attribute type or sub network. The reports can be grouped, filtered and queried with more than 100 different selection criteria and include information about cost, capacity, owner, and user specified fields. Queries can be executed and presented from any of ConnectMaster’s three views that suit the situation best; either from tabular forms, schematics or from GIS.

ConnectMaster increases productivity by automating processes. It allows you to configure the transitions, status, and overall workflow within the work order system, according to the needs of your engineers. All data modifications are managed through the process, which allows multiple views of the network and generate appropriate work orders.

Full Circuit Documentation

ConnectMaster provides Full Circuit Documentation, including design and definition, supporting an end-to-end communications network at both the logical level and the physical level. ConnectMaster lets you define the circuit path either from a customer to a switch or between multiplexer ports, and locate all physical inventory along the logical route. This complete circuit can be represented as combined “physical/logical” routing table. The documentation enables geospatial and physical inventory data to be associated with the most logical entities for integration with provisioning systems.

ConnectMaster ensures consistent and transparent mapping of the communication network (site level, regional or national), complete with all active and passive communication equipment (terminal devices, cabinets, terminal strips, multiplexers, optical and copper cables, switches, routers, etc.), as well as of the fully detailed signal, service, and channel schematics at both Layer 1 and 2 of the OSI stack.

Connectivity Management

ConnectMaster provides Connectivity Management, done by an easy-to-use graphical user interface. You can manage connectivity and service area views at the equipment level, giving you high-quality pictures of your access, service, transmission, and radio networks. ConnectMaster allows you to create and maintain connectivity at the database level, helping you manage complement, port, and strand connectivity from the customer service point to the central office and network operation center.

ConnectMaster automatically generates schematic views of the logical network helping you to visualize the circuit layout. The software supports the recording of network configuration data, including circuits, services and transport levels in order to enhance efficiency and increases the productivity of circuit management delivery activities. ConnectMaster supports a streamlined, integrated network planning process, from service requirements to network build, that lets you plan capacity, allocate bandwidth and assign circuits.

Fiber Optic Networks

ConnectMaster supports the end-to-end engineering and management of fiber optic networks. It documents splices, fiber bundles and the individual fibers using either a graphical or forms-based interface. ConnectMaster also documents fiber optic nodes comprising ODF equipment and can trace routes through any part of the fiber network, to calculate fiber lengths, display OTDR results, loss budgets, link loss and splice details. In addition, it will generate a range of reports to enable more efficient design and operation of fiber optic networks.
Copper Networks
Establishing the quality of the copper network, and related plant in the access network, is vital to ensure that it can support higher bandwidth services. ConnectMaster® enables you to analyze copper loop makeup and establish whether it is of sufficient quality to support, not just private line, digital or iSON, but also xDSL deployment.

The software allows you to:
- Manage copper network components
- Manage and track copper pairs
- Trace the network on wire level through all equipment
- Perform loop makeup reports

Wireless Networks
ConnectMaster® allows microwave links to be managed by supporting wireless plant components. Tower support structures and antenna radio transmissions can be modeled to provide point-to-point and point-to-multipoint radio connections. The standard tracing capability is supported for both wireless and wireline network topologies.

As network complexity grows, competition intensifies, and operational budgets continue to feel the squeeze, the need to optimize business processes and operations through technology becomes a mission critical priority.

It's not enough to simply keep a network operating smoothly any more. You need consolidated network management and data flow in order to make the network more efficient, to deliver more services, and to increase profitability. Benefiting from its leading approach, service and infrastructure providers are using ConnectMaster® to:
- Manage current inventories of network resources (both physical and logical)
- Define network and service configurations
- Order and schedule future resources to meet expected demands
- Create a powerful inventory system for all relevant network data
- Provide a federated database for other operational support systems

Dynamic Design and its partners provides intensive support from implementation to operations. Our specialists can help you maximize your network resources as you define your overall business objectives, operational procedures, and workforce responsibilities.

Dynamic Design offers a wide range of services including consulting, project management, systems implementation, integration and training. This gives you the resources you need to keep your network operating at its best.

Contact us to learn more about how ConnectMaster® can help you consolidate your network management functions, while giving you a clear, comprehensive picture of your entire network, thus helping you achieve more efficient, reliable, and cost effective network operations.

---

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

Dynamic Design GmbH
Werdauer Str. 13
D-10169 Berlin
T +49 (0)30 475 6303
www.dynamic-design.com

Dynamic Design GmbH
Dr. Schaeferstr. 26
A-4600 Wesen
T +43 (0) 7243 73043 0
www.dynamic-design.com

Dynamic Design AG
Durlachstr. 11
CH-5612 Villmergen
T +41 (0)56 619 46 00
www.dynamic-design.com

Dynamic Design Pty Ltd
Suite 418, 1 Queens Road, Melbourne 3004
T +61 (0)3 9863 7162
www.dynamic-design.com

©2012 Dynamic Design Informationssysteme GmbH. All rights reserved.
ConnectMaster® and Rapid Network Planner® are trademarks of Dynamic Design Ltd. and/or its subsidiaries. Other trademarks are the property of their respective owners.