GE
Digital Energy

Physical Network Inventory™ Software

fact sheet

Control Your Network – Control Your Future

Smallworld Network Inventory™ software, from GE Energy, offers leading service providers intelligent inventory to control the deployment of their network. The combination of spatially accurate inventory, integrated design intelligence and strategic decision support is critical to business survival.

Smallworld Network Inventory supports an impressive list of world class communications customers, streamlining their network planning and engineering, service fulfillment and service assurance business processes. Smallworld Network Inventory is a highly scalable portfolio of products that provide an end-to-end view of multi-vendor, multi-technology networks. Part of the Smallworld Network Inventory product portfolio, Physical Network Inventory™ offers a complete and accurate representation of the physical network, from the switch to the customer. By integrating inside and outside plant data into a single, consolidated database, Physical Network Inventory provides an end-to-end network view that allows the network model to be manipulated and visualized at any level.
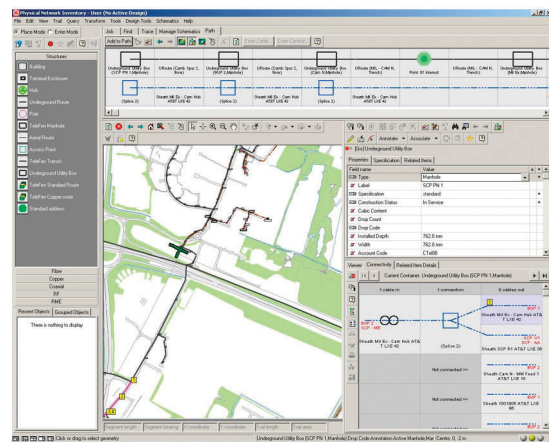
Intelligent Network Inventory

Physical Network Inventory supports all aspects of your network, from the core transmission network to the customer access network. The product's modular structure and flexibility enables it to support a variety of telecommunications service providers, such as traditional local exchange carriers, inter-exchange carriers and cable TV operators.

Physical Network Inventory is built upon a powerful spatially enabled database that provides a complete suite of tools to manage business critical network information. Physical Network Inventory incorporates:

- A data-driven equipment catalogue

- Support for work order management and generation of bills of materials

- Support for the design and documentation of both underground and overhead structures

- Effective management of the capacity of various aspects of the network, such as ducts and conduits, floor and rack space, etc.

- Generation of a range of schematic representations of the network

All data and functionality is accessed via a Windows®-based user interface which provides a consistent work flow for users and offers drag and drop creation of new entities combined with a range of wizards to assist with complex tasks.

Inside plant

Physical Network Inventory provides a comprehensive set of tools for planning, documenting and managing all of your rack-mounted inside plant configurations. Physical Network Inventory provides support to:

- Model equipment including multiplexors, cross-connects, patch panels and distribution frames

- Manage floor plans of buildings

- Manage rack layouts, including shelves and cards, down to port level

- Rapidly insert pre-assembled combinations of components via templates

- Document and manage a full end-to-end model of network connectivity

Fibre Optic Networks

Physical Network Inventory supports the engineering and management of the fibre optic networks it supports:

- Documentation of cables, slack loops, splices and individual fibers

- Association of all elements of the fibre network with both overhead and underground structures such as poles, and street cabinets

- Ability to trace signal paths through the fiber network, to calculate optical losses and to geographically display OTDR trace results

Broadband Networks

Physical Network Inventory contains a complete set of tools for designing and documenting RF/coaxial broadband networks. Capabilities include:

- Documentation and management of all critical inventory, including cables, optical nodes, amplifiers, splitters, taps and powering equipment from the head-end down to the customer-drop cable

- Combined signal-level calculations with strand and structure design

- Association of cable and equipment to overhead or underground structures

- Support for network segmentation to delimit geographic serving areas

Copper Networks

Physical Network Inventory can fully document the entire copper network from exchange to customer connection at the pair level. This detailed inventory capability allows you to ensure that your copper network can support higher bandwidth services. The copper module allows you to:

- Manage all copper network components, such as cables, splices, slack loops and in-line equipment including capacitors, load coils and pair gains

- Manage and track copper pairs using line-of-count naming methodology

- Trace the network bi-directionally through all equipment

Integration to the OSS

Network Inventory Gateway
Desktop Clients
Logical Network Inventory
Spatial Intelligence
Physical Network Inventory
Enterprise Application Integration
Field Force Automation
Smallworld Field
Core GIS
OSP/ISP + Logical Inventory
Smallworld Network Inventory

Physical Network Inventory can be integrated with other parts of your Operations Support Systems (OSS), providing open access to strategically critical network inventory data across the enterprise. Integration with best-in-class OSS products provides support for mission critical business processes such as service provisioning, service assurance, and asset management.