

LIGHTPATH

- **Helps you to sell your services effectively**
- **Developed with Telecom Operators to provide the best product possible**
- **Easy integration with other tools**
- **The Lightpath user interface includes 4 new tabs**

Integrated Network Solutions

To sell services effectively, operators must know where their customers and assignable network assets are.

LightPath facilitates this, enabling users to define and manage physical paths over hybrid networks, and assign these to customers either as dark fibre or managed customer circuits and rings.

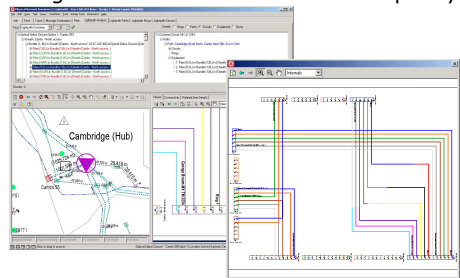
Product Information

LightPath has been developed in conjunction with a number of Telecom operators who rely on the software as part of their network documentation, assignment, operations and management processes. Built on the world-class foundation of GE's Physical Network Inventory (PNI) and Realworld's Telecom products, LightPath provides a fully integrated, configurable solution.

The LightPath User Interface includes four new tabs which are added into GE's PNI product. The four new tabs each allow query and assignment functionality. The Analysis tab works like the standard PNI 'Find tab' and allows the user to run queries on the LightPath data. The Ring and Circuit tabs facilitate path allocation and the Path tab allows the user to define and create new assignable paths.

Using the Route Finder tool, users can quickly identify candidate routes for providing a service between two points. The Route Finder identifies a set of candidate paths and prioritises them according to the number of connections which have to be made.

Integration with Realworld's Capacity



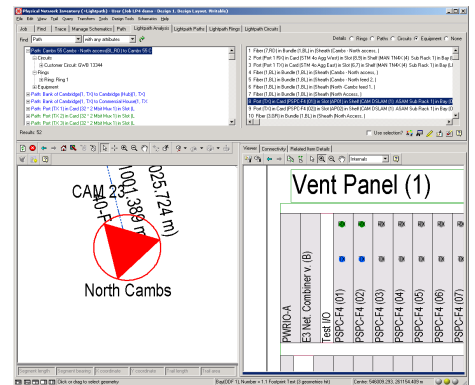
Planning tools provides immediate feedback on spare assignable asset capacity levels in the network. Network planning and engineering can then easily assess areas of the network requiring development to support new customer services.

LightPath can also be integrated with GE's Logical Network Inventory product to provide a comprehensive view of access and bandwidth managed services over the network as well as the auto-generation of logical facilities.

Assignable Path Management

The GE Energy Physical Network Inventory™ product enables users to create a comprehensive model of all network equipment, structures, residential locations and business locations. A fully connected network model can be developed, linking inside plant, outside plant and customer locations.

LightPath extends this model, enabling users to define and manage the physically connected paths in their network. Each path is defined by the set of connected ports, fibers, copper pairs or other low level physical network components which form its route.



Paths also have a unique name which is automatically generated based on its end points. This name can be configured according to in-house naming conventions.

Users can create paths manually either at pair/port level or else at the cable/rack mounted equipment level. LightPath has the functionality to automatically generate paths as connections are made between cables and ports. As the network is modified through new build or repair, LightPath can also automatically re-build the paths to match the new physical layout, retaining information on the circuits and rings routed over the paths. For example, if a new node is added to a ring, LightPath can automatically extend the paths to include the new elements as the new ports are jumpered to the cables.



Circuit Routing (Path Assignment)

Using LightPath, users can define and manage customer records and the circuits/services they have ordered. Rings can also be defined and then used as part of the circuit definition.

The circuits and rings are then routed over the network by assigning paths to them. Available paths can be identified through the LightPath analysis user interface. Users can select an object such as a Building or a sheath and analyse them to find out information on the paths and their routes that are associated to them. The paths can then be sent to the circuit or ring user interface for assignment.

Circuit Routing (cont...)

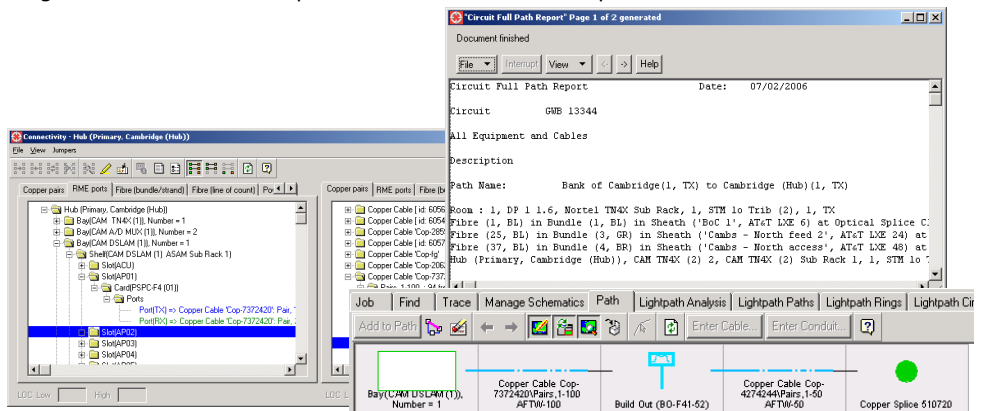
The LightPath Route Finder can also be used to route two ended circuits through the system. Using this, the user identifies the circuit A and Z locations either graphically or from a database query. The system will then identify a high level route, and from this will identify the various ways in which the circuit can be routed. Candidate routes will be ordered according to how many connections will be required to implement them.

The data model can be easily configured to include new attributes and service types for the circuits. Rules can also be defined limiting the number and type of circuits that can be routed over a particular path.

Querying, Reporting, Viewing Network Assignment

LightPath provides a wide variety of intuitive features and tools to query, view and report on network assignment as well as circuit and ring definitions. Users can 'drill down' to find the network components supporting a service, or 'drill up' to find the circuits routed on a cable or a network element.

LightPath also enables reports to be created and output in HTML and also Microsoft



Office products such as Excel and Word to enable circuit routing and jumpering information to be provided in a standard format.

LightPath colour codes cable and port information to give immediate visual feedback of resource utilisation. By default, inventory that is being utilised by rings are coloured red, by circuits are coloured blue and by path are coloured green. The physical network is also annotated with circuit information. In particular the circuits routed through a sheath are displayed within the graphical representation of the sheath within its splice.

LightPath also integrates with the standard PNI Path tab, enabling users to display the high level routing information for a low level path.

Capacity Management

When integrated with the Realworld Telecom Capacity Management (TCM) suite, LightPath can enable key assignable resources to be capacity tracked and managed, for example, the number of spare pairs in a copper cable, spare fibres in a sheath, or spare ports in a street cabinet, ODF or DSLAM. TCM issues alerts when key user defined thresholds are reached.

Logical Network Inventory Integration

LightPath can also be integrated with GE's Logical Network Inventory product. The integration works bi-directionally. LightPath automatically creates the logical facilities which bandwidth managed services utilise as the physical network is designed. When a bandwidth managed service is routed and the resources reserved, the information is then returned to LightPath, to provide a complete view of both the access and transmission circuits in the network.