



# Graphical interrogation simplifies Belgacom's network ops management

**Issue:** The network equipment and connectivity database used by the services delivery and engineering department of Belgacom International Carrier Services has a text interface, making searches and interrogations slow.

**Solution:** A graphical front-end interface that allows users to interrogate the data graphically, and drill-down to find details of equipment and connectivity.

On-demand maps, documentation and analysis of the transport layer – generated by a novel software tool – are now helping to streamline operational support activities for Belgacom International Carrier Services (BICS). BICS invested in the new software to simplify operational engineering work, as its long-established network equipment and connectivity database has a text based interface, which is not exactly user-friendly.

The operations support system (OSS) tool, NetworkObjects allows the carrier's service delivery and engineering staff to quickly locate and view details of the equipment and connectivity at any point in the telecommunications network, via interactive map-style views and reports. Within a few mouse clicks, staff are able to 'drill down' through the transport layer data to find the exact information they need to make good decisions on operational engineering matters such as provisioning, maintenance, planning and training.

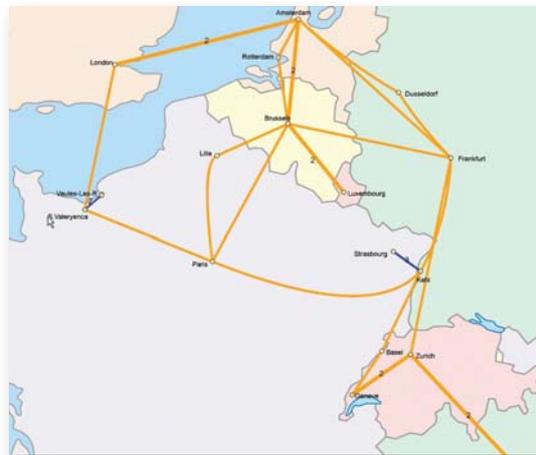
"NetworkObjects gives us a visual means of interrogating our network equipment inventory and connectivity database. It gives our people a faster, more intuitive way of locating and understanding information, compared with the text-based interface we used before," says Pierre Doat, director, Transport Layer of Belgacom International Carrier Services. "The tool has proved to be an important asset for our services delivery and engineering staff during a period of substantial expansion in both our business and the department."

NetworkObjects is automatically reconciled with BICS' inventory database every day and has been configured to provide numerous interconnected visualisations and reports on the data. These range from an overall graphical 'map' of the carrier's entire network, to detailed descriptions of physical and logical network resources and configurations. The package, which is developed by NetworkMining, uses standard web browser technology, with vector graphics to ensure that maps and plans remain clear at all stages of drill-down.

Graphical interrogation techniques make it easy for staff to find the information they want. If they

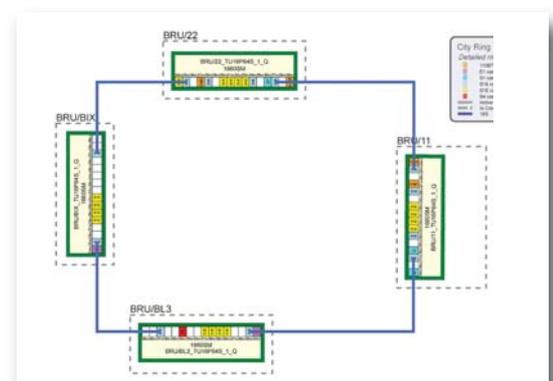
are interested in the equipment configurations at a particular POP they can select the view within a couple of clicks, starting from an index of some 20 standard report views available on the tool's home page. But if they are not quite sure how some equipment or site has been named for example, they can find it via a global map just by clicking on areas of interest and drilling down.

NetworkObjects additionally offers a 'wildcard' search facility that the staff reportedly find extremely useful, as it allows them to locate equipment using just a partial form of the name or serial number. ■



*High-level maps are just one of the graphical entry points to the equipment and connectivity database that NetworkObjects provides. More details can be gained by zooming in, hovering, or clicking on nodes on the map. Further reports that provide details down to the equipment card level are then available.*

*A Ring Layout report, showing the transmission systems in a particular city ring; further drill-downs are possible, hovering or clicking on the blue links provides details of the trail for example.*



Pierre Doat, director, Transport Layer of Belgacom International Carrier Services (BICS)



Belgacom International Carrier Services (BICS) is a joint venture between Belgacom and Swisscom, offering voice, data and value added services with POPs in 22 countries. In the past three years, BICS has transformed itself from a regional organisation into the world's eighth largest voice carrier.