NETWORKMINING
NETWORK BUSINESS INTELLIGENCE

Integration based on MTOSI: linking an NMS and a Network Resource Visualization and Analytics application

Companies submitting case study:
NetworkMining

Authors:
Nico Wauters

Applicable TM Forum Technical Areas:
NGOSS (MTOSI)

Viewpoint:
Service Provider Perspective, System Integrator Perspective

Services:
All

Network Technologies:
SONET/SDH, Ethernet, WDM

Business Problem:
Having separate NMS systems for every vendor's equipment and technology combination makes it complicated for network operators to keep an overview of how these different network devices are interconnected to support a particular service. In addition, it is also very complex to predict how planned maintenance for a particular vendor's equipment affects end-to-end services and which individual customers need to be informed of a maintenance window.

Telenet is the most important supplier of broadband cable services in Belgium. Telenet uses NetworkObjects to overcome the above described challenges in the optical network. NetworkObjects is a Network Business Intelligence application that retrieves and combines data from vendor-specific NMS used in the network to create a graphical and unified end-to-end view of all network resources.

Solution Implementation:
Depending on the underlying capabilities of each equipment vendor's NMS, the integrations are based on either standard-compliant or vendor proprietary interfaces. For the vendor, which is one of Telenet's WDM suppliers, its NGOSS-compliant management system provides MTOSI interfaces to simplify integration.

The integration between NetworkObjects (NetworkMining's Network Business Intelligence applications) and the vendor Specific Network Manager (MMS) has been achieved using an MTOSI 1.1-based interface to continuously retrieve updated resource and service information from the WDM network to NetworkObjects.

The integrated solution provides improved capacity management of all physical and logical resources in Telenet's optical network. For example, it can help presales engineers to design new services with a minimum of effort by graphically representing installed equipment and available capacity. It also simplifies the service assurance process related to trouble-shooting complex multi-vendor and multi-technology solutions. In addition, the application is used to prepare for planned maintenance works.
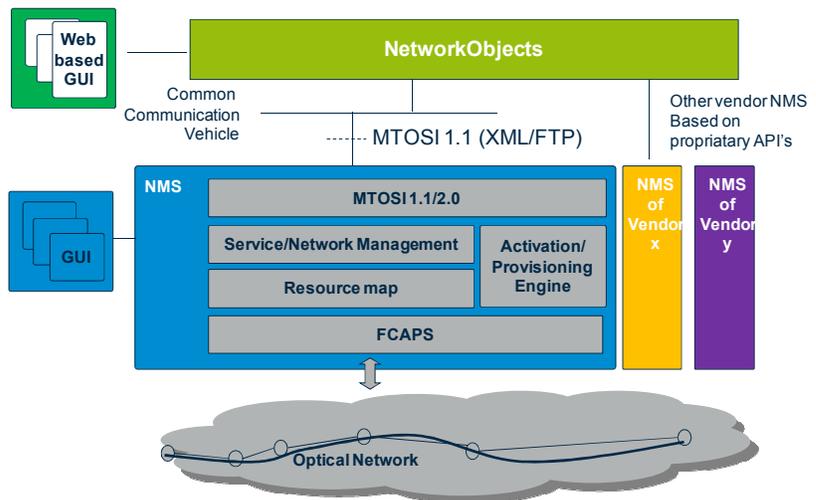
Deployment and Results:
As the implementation was based on existing NGOSS interfaces, the integration project was finished successfully in a minimal timeframe. Important time saving and risk reduction were achieved both in specification and implementation phases compared to earlier integrations that had been based on vendor-proprietary interfaces. The use of the NGOSS interface reduced the specification and implementation time by 60-70%.