

# Case Study – Multi-service NMS Solution

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## Our Client

**A leading telecoms equipment provider**

## The Challenge

To build a Carrier Class multi-service Network Management System (NMS) for a broad range of diverse network equipment. The equipment included IP / MPLS routers, Ethernet switches, ATM/Frame Relay/CEM switches either built by the equipment provider or OEMs from other vendors.

The NMS had to provide streamlined FCAPS (Fault, Configuration, Accounting, Performance & Security) support, abstracting away the underlying differences of the individual network equipment while presenting a unified management view to the end user.

The system had to be highly scalable (10's to 1000's of network elements) and highly reliable to meet the 5 nines (99.999%) uptime required by telecoms operators.

## The Solution

The senior team at Amartus held key leadership roles on this product development team totalling some 55 engineers across two sites (Ireland & US). They oversaw the product strategy, engineering management, architecture / design & engineering aspects of the solution.

The NMS solution incorporated many frameworks & components supporting a comprehensive set of features including Graphical Networks Maps, Network Discovery, Performance Monitoring, Network Configuration, Fault Management, Multi-Service Provisioning, Inventory Management and an OSS Integration Interface based on TMF 814/CORBA standards.

The NMS had a Web based GUI and was built using Java / Java Swing / Servlets running on Apache Tomcat on both MS Windows, Solaris Servers & HP-UX.

The solution was built with the goal of minimising the time required to provide support for new equipment or software.

The team worked in close co-operation with the equipment teams at the vendor to align the roadmap for the NMS with the roadmap's for each piece of supported equipment.

## The Benefits

The extensive NMS development expertise gained by the team while working for leading equipment providers prior to this engagement allowed them to quickly architect and build a solution that meet all of the management needs of the equipment providers customers

## Our Strengths

- Extensive experience developing Carrier Class Network Management Systems for leading telecoms operators
- Experts in building highly scalable enterprise solutions using a variety of platforms
- Strong product strategy & development experience
- Proven track record in successful delivery of projects on-time and to budget
- Mature, dedicated teams of highly experienced solution analysts, architects, designers and engineers
- Quick turnaround, minimum ceremony & low overhead

## About Amartus

- Headquarters in Ireland, with development centres in Dublin & Eastern Europe
- International client base (US & Europe)
- Sole focus on Telecoms software systems development
- Proven track record in New Product Development & integration projects
- Mature, dedicated teams of engineers
- Long term relationships with a small number of key client companies
- Proven iterative software development process
- Low staff attrition
- Strong client IPR protection