



Network Resource Management

How do you Cut OPEX while Enabling Improved Service Quality?

No matter who you are - a telecom operator running a large network, a mobile operator moving towards 3G, or an ISP offering content based services - you have experienced the downturn of the market and you are likely to be constrained by demanding economical goals. Is it possible to provide a solution that reduces your operational expenses while still yielding a true return on your investments?

We believe that many operators can increase their utilisation of network equipment and servers by the use of a Network Resource Management (NRM) system. This allows the operator to manage resources during their entire lifecycle. The immediate benefit from this is that you are always up-to-date with the state of both your existing network and the planned changes. You have, at your fingertips, the means for identifying stranded assets and optimisation of how expensive resources are used, as services implemented on top of these resources are discontinued and new services shall be provisioned.

Another benefit of a modern NRM system is that you can streamline your processes and thus let your staff conduct their work in an efficient way. With the lifecycle knowledge for resources, the NRM system becomes the centre around which your working processes are built. A further potential that this brings is integration with other OSS's. For example:

- Integration with ERP systems in order to automate the supply chain
- Integrate with fault and performance management systems thereby letting them take the full advantage of all network information available from the NRM system
- Integrate with radio planning, workforce management or other tools

To summarise, according to OSS analyst RHK: NRM pays off for service providers because it provides operational efficiencies and better visibility and control of capital investments.

Your NRM Solution

Teleca has worked actively with operators on the NRM arena for a long time. We use market-leading off-the-shelf products, configured for your needs. Depending on your type of network we will make sure the NRM system supports your switches and routers, your application servers, your network technologies with your links and connectivity between the devices, and other resources such as IP addresses.

Your NRM solution should also be characterised by its openness. Common examples are to let fault management systems retrieve data about resources in addition to what network equipment provide in alarms, and to explore the impact a fault has on customer services. Other examples are to integrate with systems used by the service provisioning processes, or to provide performance applications with information of network topology.

Our Service Offer

Teleca helps operators to identify and deploy NRM solutions based on best-of-breed components commercially available. We have no products of our own. Instead, we locate applications from leading independent software vendors that can be integrated with our customers' unique solutions. We see the NRM system as the hub of an advanced OSS infrastructure, as an integral part of the *Fulfilment* solution, and the target is to fully exploit the possibilities – with a close eye on return of investment. As you have already seen in this paper, the key to a successful handling of network data is to integrate the inventory system with the surrounding OSS environment.

Teleca provides help in:

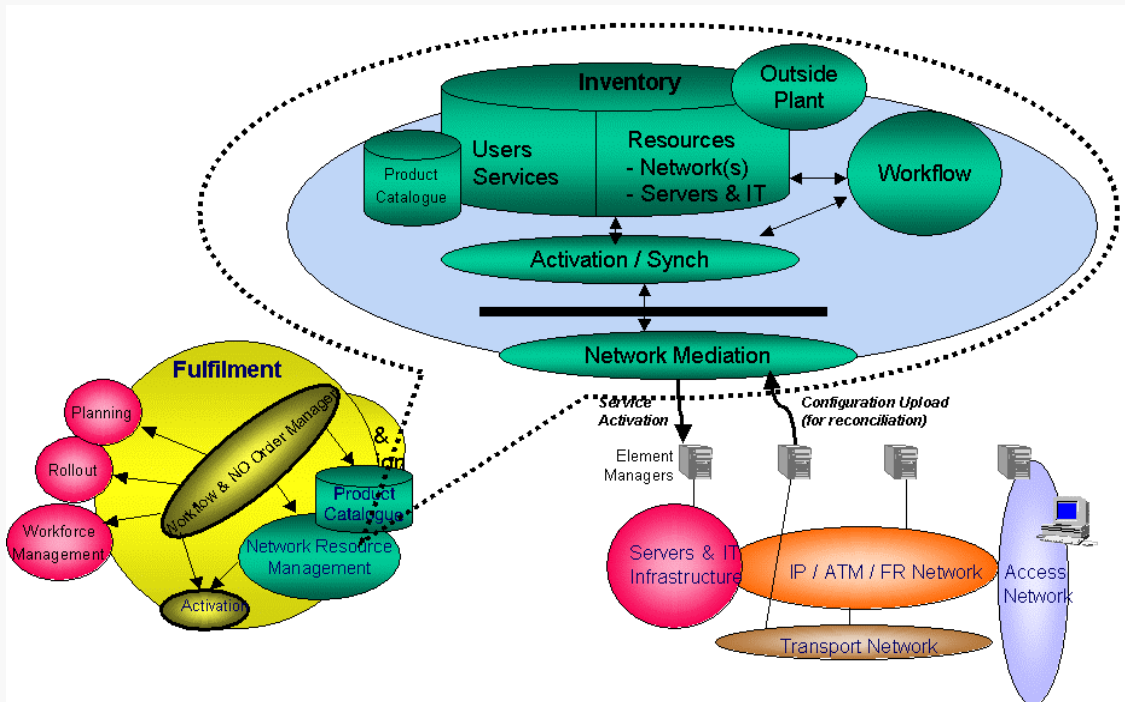
- Pre-studies and procurement
- Feasibility studies and Proof-of-Concept

- Implementation and data migration

Teleca offers unique advantages based on partnership with leading vendors as well as experience in leveraging on the NRM solution by integrating it with the surrounding OSS environment.

Recent engagements cover

- A data migration and cleansing project for a major Nordic operator's copper access network when migrating from a legacy environment into a modern NRM solution.
- Implementing a network reconciliation solution for a SDH transport operator to ensure consistency between the network and the inventory.
- Implementing a NRM solution for a 3G operator.



Teleca is an international consulting company building and applying advanced technology. The company's business concept is to strengthen the customers' market position and time to market. Teleca builds and integrates solutions for technology and software intensive customers worldwide. Core values are honesty, reliability and hard work. The company has 2,700 employees with operations in 15 countries in Asia, Europe and USA.