



StableNet Telco: Transformation to a Unified OSS Management

Peter Moessbauer, Strategic Alliances Manager, Infosim, discusses cost effective network management

Service provider networks have grown into highly complex islands of infrastructure from multiple vendors, covering multiple technologies - each with its own management system. Complexity is making it harder and more costly for service providers to create, deploy, provision, monitor, control, troubleshoot and bill services effectively and quickly enough to stay ahead in today's intensely competitive markets. The situation will worsen only as fixed-mobile convergence progresses and end-users increasingly demand tailored packages of services available anywhere, anytime and on whichever device they choose.

Telco fix and mobile network management, IT-Systems and Application-Services-Management are more and more converging into integrated Services Quality Management, as whole End user services require services assurance.

In case of services outages or performance degradations (current and upcoming) the root cause has to be instantly identified to allow for rapid service restoration - all about to limit the impact on business revenue streams and reputation.

Operations Support Systems (OSS) enable the service providers to manage their networks and the end-user services they provide. Being deployed over decades, the OSS installed performs these tasks in a more or less efficient way.

Controlling thousands, if not hundreds of thousands of network and IT components, the OSS are the critical

mechanism for turning Telco infrastructure investments into revenue.

Yet nearly all OSSs are highly fragmented, built up piecemeal over the years by adding a variety of systems from vendors of all types, to meet the needs of the moment. And each provider may have 1,000's of individual applications that must work together to support the management of network and services. Against this background, a fundamental question must be asked: Is the current process of building, maintaining and operating OSSs sustainable in the coming years?

To secure their future, service providers must address key issues as they search for improved efficiency in their operations and advanced services that will win lucrative new revenue streams. Converging services and new technologies, customers expect a set of fully integrated services tailored to their needs, regardless of their location or the devices they are using across a converging set of technologies and media.

Service providers being able to deliver converged packages at the expected services quality will have a strong competitive advantage over those selling single, isolated services.

How is Infosim addressing these Telcos challenges?

Infosim, based in Germany are providing the solution StableNet Telco to gain the real time network, IT-services, system status and the performance visibility Telcos require for their services

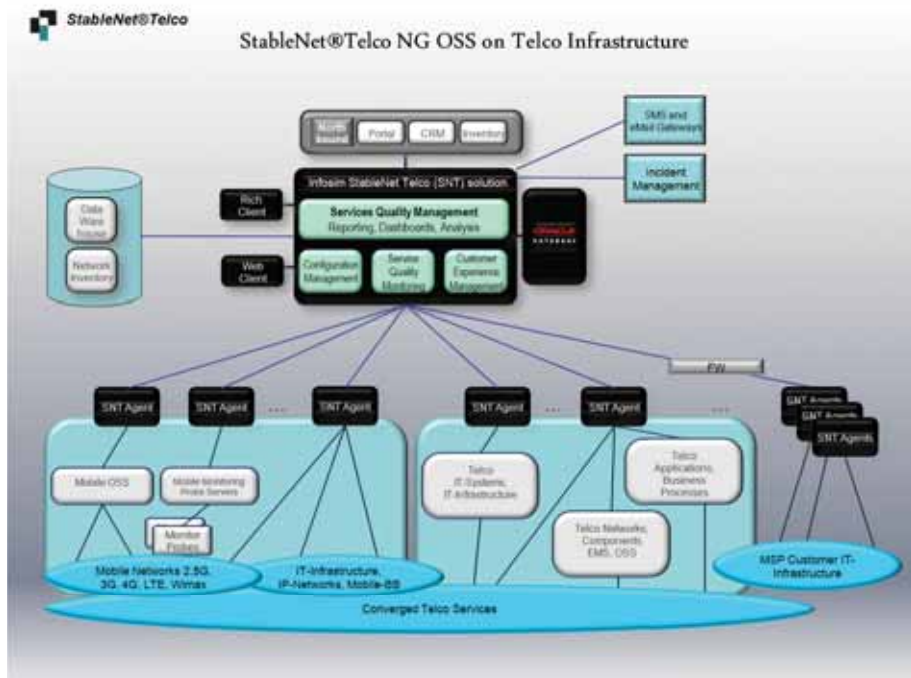


Fig. 1 StableNet Telco SQM Architecture

► operations and IT management teams, to be able to provide and ensure most efficient services at targeted quality.

Key challenges addressed and solved by StableNet Telco are:

- Gain holistic Services status e.g. from Telco networks, LAN, WAN, Load balancers, Firewalls, IT-Server, VoIP systems up to Web-Server and IT-Application-Server installations by one vendor agnostic management solution.
- Gain this Services visibility by a real integrated management solution, running on one consistent services data model, as a key element - instead of a zoo of multi tier and multi silo management tools, bundled by marketing.
- Automate your Services and IT Infrastructure Management with automated discovery, automated best practices monitoring, reporting and actions, which allows reliable security in developing and providing new services.

At present every operator and CSP around the world is being challenged to increase their revenues. We keep hearing about voice revenues declining and for years we have been waiting for data revenues to increase to make up the short fall but that hasn't happened. The solution is to provide new services, but a major challenge is deliver the required service quality level, to cut down on down time and on overall costs.

How can StableNet Telco be utilized to help on this?

One key benefit of StableNet is that the proactive management of new revenue increasing services can be rolled out more safely and much quicker, as the monitoring and ensuring solution services are short term available at less cost.

For example having StableNet Telco integrated services

management earlier on new services deployment, allows for handling of hotspots before bad performance affects your business.

Another point is the ability to identify the source of a problem in real time, which allows instant fast troubleshooting (as most time is spent on searching the cause of the issue).

This cuts down on 'mean time to repair' (MTTR). Minimizing downtime expands the Telcos service availability and it has a direct, positive impact on the revenue.

It is always good to answer yourself the question on how much a 1/2 hour downtime or degraded services will cost your organization in revenue – and on what countermeasures you have taken to reduce this in time and cost?

How is this implemented by StableNet Telco?

When deploying new Services, it is usually a challenge to get services management for the converged network and IT-environments in place in time.

Infrastructure components like IP/WAN, MPLS, mobile networks, VPNs, LAN, VoIP, IT-Systems, up to business processes need to be brought under one hat to allow for efficient services management.

StableNet Telco is setup to perform integrated and automated services management from fix and mobile networks, IT-infrastructure and IT-systems up to Telco services.

The StableNet Telco solution is different as it integrates 3 solutions and functional areas into one product, covers the integration of heterogeneous and converged infrastructures - and key for operability, it is based on one common data model:

- Performance Management & Monitoring
- Fault Management, Monitoring & Root Cause Analysis

- Configurations Management and Inventory Support and Handling

To handle this StableNet Telco does support key Telco and IT requirements out-of-the-box

Key elements as listed below are available as today:

- Multi technology and multi vendor device and systems support
- Automated Root Cause and impact analysis
- Auto-discovery on the MPLS, IP- and IT-infrastructure and on inventory DBs,
- Single point configuration, system aided services modeling support
- SNMP v1,2,3 parallel operation,
- non-SNMP data like CSV, SQL/JDBC data base integration, CORBA, MTOSI, Web 2.0
- Full IPv4 and IPv6 support
- Distributed online and off-line agents,
- Multi-tenancy, time-zone / business hours / maintenance window support
- Vendor independent configuration and policy management
- Vulnerability and EOL/EOS (End of Live/End of Service) support
- Telco grade operations support features

The 3 functional areas can be used as single product, or separately to replace legacy solutions gradually as required by your operations, this provides a matchless synergy for your next generation management solution.

StableNet Telco does identify Hot Spots, Bottlenecks, and capacity trends, outlines SLA trends to pro-actively prevent upcoming issues before they hit and provides

solid documented information, allowing to do right-sized investments at the right spots.

It also does document Services Quality by automated, comprehensive reports for your target users in a proactive rather than reactive way.

In addition the possible direct integration of Telcos existing Business Process Monitoring with StableNet in a most easy and efficient way, will allow including BPM into overall Services-Views, providing holistic overviews on services and infrastructure.

How can an additional investment in StableNet Telco be justified, as many Telcos do have already a zoo of OSS installed – and had spent a fortune on this?

First, the roll out of new services within converged fix, mobile and IT-Infrastructure would, does require large efforts and investments into the expansion of existing, usually silo based OSS.

This could be even regarded more like a “patchwork”, as legacy OSS are not suited well for the required enhancements and in multiple cases it might be not even practically possible.

It is much more effective and cost saving to deploy a 3rd generation NG OSS solution like StableNet Telco, which was designed for such tasks and future roll-outs of new services. For Telcos who fear the risk of a change to new services management, StableNet Telco could be operated in co-existence with existing OSS and once regarded as safe, the legacy OSS could be stepwise phased out.

Second, maintenance cost reduction is a key area for Telcos, who usually have to spend maintenance fees for multiple management systems, parallel in place. StableNet does help to cut costs as this 3 in 1 solution does not cost for three. Just by this cost reduction, an investment in StableNet will pay off in usually 2-3 years.

StableNet Telco is a future proof integrated services management platform that covers the Telcos requirements in a cost effective and most professional manner.

If you would like to read more about StableNet its benefits from an independent point of view please view also this link, <http://www.intercomms.net/issue-18/cs-1.html> to read about Nucleus Connect on their StableNet Telco deployment.

For more information visit:
www.infosim.net

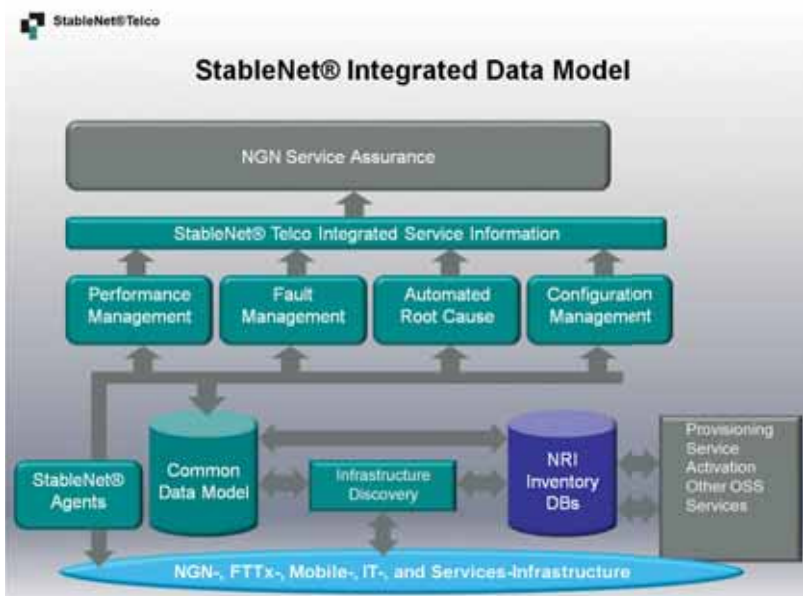


Fig. 2 StableNet Telco Functional Architecture