



Realise more effectiveness from network operations and resources

Ventelo operational model ensures best-in-class customer experience underpinned by five nines availability

EXECUTIVE SUMMARY

Customer Name: Ventelo

Industry: Service Provider

Location: Norway

Company size: 800 employees



Challenge

- Speed up the evolution to 'five-nines' carrier class availability
- Change IT service management from reactive to proactive

Solution

- New world class operational model based on Cisco Network Optimisation Support and High-Touch Technical Support services
- IP Next-Generation Network with Cisco CRS-1 Carrier Routing System foundation

Results

- Proactive, predictive and pre-emptive IT management
- Award winning customer service, backed by 99.999 per cent availability
- Improved IT governance and path towards accelerating future service revenues

Challenge

Ventelo has 30,000 business and 100,000 residential customers and is the second largest supplier of voice and data communication services in Norway. The group was formed through the merger of the existing Ventelo business with BaneTele and Broadnet to create five new business areas: Ventelo Privat, Ventelo Bedrift and Ventelo Wholesale, the wholly owned subsidiary Broadnet and Ventelo Networks, the service production and delivery arm of the business.

To help realise its vision, to be the biggest and best challenger in the Norwegian telecommunications market, the service provider is completely transforming the way it operates and manages its network.

Vidar Moen, Chief Technology Officer for Ventelo Networks, explains: "The initial focus was to increase coverage and our customer base. But, this part of the strategy could only achieve so much. We also knew that we needed to take the customer experience to a whole new level. That meant solving a deeper, underlying set of complex operational challenges as well."

The new organisation had effectively created a diverse fibre-based infrastructure that was made up of different architectural designs and hardware and software components. Lack of integration and standardisation also extended to network operations, which until this point had relied heavily on various manual processes and reactive 'break-fix' maintenance. This fragmented environment made

it difficult to get a clear view across the network or to accurately predict events. Faced with explosive traffic growth, Ventelo's operational teams soon became engulfed in a tide of network stability problems.

"It was all highly reactive. There was no time to step back and plan. As quickly as we resolved a fault or carried out an upgrade in one part of the network, another one would appear somewhere else. Availability then started to dip below industry averages and it wasn't long before customer satisfaction began to suffer," says Moen.

Solution

Ventelo developed an action plan, based on the Cisco Service Assurance Roadmap (SAR). Designed by Cisco Advisory Services, the SAR framework offers a path and proven methodology for improving IT operational efficiency, productivity and business agility. This is achieved using benchmarking tools, remote monitoring and on-site analysis to categorise a network into one of eight milestones and maturity stages. "Cisco helped us to evaluate our current status and then work toward, and move through, a logical series of milestones, achieving best practice at each step of the way," says Per Magne Olsen, Head of Group Procurement for Ventelo Networks.

The first challenge was to address Ventelo's immediate network performance issues. Cisco together with the local systems integrator, Datamatrix used various audit tools, such as Cisco Discovery, to start to build an in-depth view of network topology, choice of hardware and how these assets were being deployed. Taking this baseline data, the next task was to review the network design and look at all the devices connecting into the core. This helped Ventelo to pinpoint current weaknesses and vulnerabilities in its network.

Results from the audit were used to develop a 'business safe' migration plan for upgrading Ventelo's foundation technology. "We were able to build from the inside out and create a next-generation IP core while, at the same time, using the knowledge we had gained to de-risk the project and minimise potential disruption to our customers," says Moen. Based on the Cisco CRS-1 Carrier Routing System, the new IP backbone is connected to a nationwide fibre network that spans over 23,000 km – including the fiber owned by Ventelo's owners and partners – and links together the four largest cities. This enables the delivery of services to cities and towns nationwide, all within one fully redundant design.

Next, having consolidated platforms and streamlined software, Ventelo decided to move operational excellence up another level. The second stage of the action plan focused on using Cisco Network Optimisation Support (NOS) services to transform network management and operations.

"It was like a fog had been lifted. The NOS service provided a rapid high quality validation of our hardware and software install base, configurations and notification of alerts. This gave us a good view of the current health of our network. It also made it much easier to spot potential problems, like Cisco IOS Software inconsistencies, and to then use this data to update our IT change management," says Moen.

Having improved visibility of assets, a pre-requisite for predictably managing the health and stability of any network, the next step was to look at ensuring operational excellence from a process perspective.

Through a series of interviews with internal stakeholders, Cisco provided Ventelo with a 360-degree review of its organisational structure, employees and operational processes. Based on IT Infrastructure Library best practice for IT service management, the review enabled Ventelo to benchmark current performance against its peers. It also helped to identify potential areas for automation and standardisation of these procedures. Moving forward, the intention is to develop specific deliverables to address these areas and enable Ventelo to extract even greater value from Cisco Advanced Services.

The introduction of Cisco High Touch Technical Support (HTTS) has provided a foundation service to support Ventelo's Network Operations Centre and last-level engineering teams. In the first instance, HTTS ensures a highly efficient fast-track escalation and fault resolution service. Once the immediate problem has been solved, Cisco NOS engineers investigate to discover the root causes and help ensure that it will not happen again. Other benefits include knowledge transfer sessions, design collaboration, TAC support, and advice on managing security alerts and software recommendations.

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—Vidar Moen, Chief Technology Officer, Ventelo Networks

Results

Ventelo's IP Next-Generation Network and new operational model has helped it to achieve the Holy Grail: best-in-class customer experience underpinned by five nines (99.999 per cent) network availability. This foundation has become a business imperative for any service provider looking to effectively manage customer loyalty and increase market share.

Ventelo can now quickly identify and resolve potential incidents before they become major network issues. "Purchasing Cisco Network Optimisation Support and High-Touch Technical Support services was one of the best decisions we've ever made. In fact, we cannot remember the last time we had a serious incident with the core network," says Moen.

By placing a proactive, predictive and pre-emptive IT management model at the heart of its strategy, Ventelo can now focus on creating new revenue generating services rather than constantly having to trouble-shoot network issues.

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—Vidar Moen, Chief Technology Officer, Ventelo Networks

Greater visibility and control of assets has improved prioritisation of IT projects and enabled these investment decisions to be managed within a holistic lifecycle management approach. As part of a new governance model, Ventelo and Cisco created a joint Steering Committee, which meets quarterly to review operational issues and infrastructure and services strategy. Technical competency and productivity levels among its engineering teams have also increased significantly.

The value of Ventelo's new operational model was demonstrated in 2009 when it merged the former BaneTele and Ventelo IP infrastructures. "Before, major network change on this scale would have meant paying to bring in external expertise because our internal resources were busy fire fighting problems. By having a more proactive operational model with more predictable workloads we were able to manage the project in-house using additional support from NOS engineers," says Moen.

Another success swiftly followed when Ventelo became the first Cisco Managed Services Channel Programme (MSCP) certified partner in Norway. Under the MSCP, Ventelo had to demonstrate the depth of its experience remotely managing services from a network operations centre and their capabilities to deliver Cisco technologies as a service. Forrester predicts that managed services could be worth as much as US\$53 billion in Europe and \$217 billion worldwide by 2014.

Having the infrastructure, processes and this partnership in place has strengthened Ventelo's position in a market that is growing at twice the speed of traditional delivery models. Accreditation to the MSCP also means that the provider is eligible for premium terms on customer equipment, rights to the Cisco Powered Managed Services logo plus other new benefits.

Next Steps

The new services model has acted as a catalyst for a closer and deepening relationship between the two companies. Due to commence shortly, the third phase will look at developing a better understanding of the way in which operations impact overall business performance. Joint workshops will identify and agree a set of meaningful and adaptable operational key performance indicators (KPIs). The intention is to then map these onto operational processes to form a more closely integrated governance model, giving Ventelo a clearer line of sight between the severity of network incidents and their effect on customer service levels.

Following successful completion of the Business Alignment engagement, Cisco network architects and Ventelo sales and marketing teams will start to look at ways of using the modernised infrastructure to accelerate service creation and time to market.

"The next logical phase will be to improve our business agility. In the past, it could take more than a year to develop and launch a new service. Although we have only started to scratch the surface, we believe that we could significantly reduce this," says Moen.

PRODUCT AND SERVICES LIST

Routing and Switching

- [Cisco CRS-1 Carrier Routing System](#)

Services

- [Cisco Network Optimisation Service](#)
- [Cisco High-Touch Technical Support](#)



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