FORTINET

CASE STUDY

Sweden's Largest Regional Health Provider Secures Its Services With Increased Performance and Reliability at Lower Cost

Region Stockholm is responsible for all publicly financed healthcare and public transport in Stockholm County. As one of Europe's largest healthcare providers, offering everything from telephone advice about self-care to advanced specialist treatments at university hospitals, Region Stockholm has overall responsibility for the county's healthcare provision and must meet the targets of the Swedish Health and Medical Services Act. The Act mandates high-quality, equal care for all of the region's 2 million citizens.

Patients access initial care via a network of some 1,200 local medical centers, which form part of the region's outpatient service as well as offering psychiatric and geriatric care.

Essential to the planning and provision of the group's healthcare services are the detailed medical records of the region's inhabitants and the IT infrastructure responsible for the secure processing, storage, and retrieval of those records.

A Secure and High-performance Hospital Network for One-third of the Cost

In addition to the 2 million citizens served, Region Stockholm employs around 50,000 staff and operates four major hospitals, so network performance and reliability is just as critical as network security.

Back in 2015, a government tender was issued to replace the network security infrastructure for one of the region's four large trauma centers. The winning solution was based on FortiGate next-generation firewalls (NGFWs).

With its purpose-built security processing unit (SPU), the FortiGate NGFW can identify thousands of different traffic types and carry out a comprehensive range of advanced threat-protection processing without compromising throughput or latency.

This industry-leading performance, combined with the granular scalability of the full product portfolio, meant that Region Stockholm could deploy a security-driven networking solution by consolidating multiple security functions into the same FortiGate NGFW for about a third of the investment that would be required to achieve the same overall throughput with the previous vendor's firewalls.

Reducing the Management Burden

In addition to the superior performance of the new Fortinet solution, Region Stockholm's IT team soon found that they were spending far less time on fault resolution, and on the occasions when manual intervention was required, the necessary changes could be made much more easily.

Region Stockholm

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– Andreas Bonin, Network Specialist, Region Stockholm

Details

Customer: Region Stockholm

Industry: Healthcare

Location: Stockholm, Sweden

Business Impact

- Achieved 99.999% network availability goal through 20-fold increase in capacity and improved resilience

- Increased visibility and ease of management for greater security and more efficient problem resolution

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Building on this success, the Fortinet solution was subsequently deployed to all four hospitals and both data centers in Stockholm. Bandwidth to the data centers was increased from dual 500 MB links to dual 10 GB links, increasing throughput, performance, and security for the myriad network services upon which the hospitals rely.

"Security is obviously a key concern for us at the hospitals where we have public Wi-Fi services running alongside critical care equipment such as MRI scanners and other medical devices, all of which require secure network connections, as well as all the hundreds of other healthcare systems" adds Bonin. "So, the FortiGate NGFWs are handling all this segmentation, providing high-speed connectivity where required and ring-fencing everything else."

FortiManager now provides Bonin and the team with automation-driven centralized management from a single console for full administration and visibility of all 48 NGFWs (and any future Fortinet products acquired) with streamlined provisioning and innovative automation tools.

To extend the single-pane visibility and control of FortiManager to encompass orchestration, automation, and response, FortiAnalyzer was also deployed, allowing for simplified security operations, proactive identification and remediation of risks, and full visibility of the attack surface.

Since overall security operations is run by another government department as an independent security operations center (SOC), FortiManager and FortiAnalyzer have been configured to provide the necessary analytics and logs directly to them.

The solution also leverages external threat intelligence provided by FortiGuard Labs, which collates and processes the data from myriad anonymized sensors and over 200 global partners around the world using artificial intelligence and machine learning to identify unique features for both known and unknown threats.

"Before the upgrade, it was hard to imagine how we would meet the five nines [99.999%] availability goals we needed to reach across all our network services," concludes Bonin. "But with the help of our local Fortinet team and chosen partner, not only have we achieved this, but we have future-proofed our capacity and performance requirements and have gained a level of control and visibility which makes us confident in our ability to continue doing so."

Business Impact (contd.)

- Lowered total cost of ownership (TCO) through reduced capital as well as operating expenditure
- Improved internal risk management by preventing lateral spread through adaptive context-aware segmentation

Products

- FortiGate
- FortiManager
- FortiAnalyzer

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