



Objective

Reduce datacenter costs by migrating legacy infrastructure to more cost-effective, scalable, reliable, and higher-performance platforms

Approach

Migrate to x86 reliability and availability on the Superdome X Server and open systems licensing to drive down operational costs while focusing on increased performance and improved availability

IT Matters

- Achieved tenfold improvement in system performance after deploying the HPE Integrity Superdome X Server
- Ensured continued infrastructure reliability for mission-critical collections application
- Achieved deduplication of stored data of over 30% with HPE 3PAR StoreServ Storage

Business Matters

- Streamlined online debt and fee collection for 35 government agencies
- Enabled 90% of collections to be processed online
- Delivers highly reliable infrastructure to support collection activities, which can total as much as 20 million Norwegian kroner daily

Statens Innkrevingsentral increases server and storage performance 10X

Government agency achieves high-availability collections infrastructure with HPE solution



Statens Innkrevingsentral (SI) is part of the Norwegian Tax Administration, and it collects fines and other payments that are due to client organizations throughout the government. SI needed to improve the performance and reliability of its collections infrastructure and selected HPE Integrity Superdome X Servers to reduce costs, improve performance, and increase scalability.

SI centrally collects debts and fees on behalf of 35 other Norwegian government agencies, ranging from police departments to the State Education Loan Fund. SI has to comply with a number of rules and regulations as well as coordinate with other Nordic countries on the collections process.

Nearly 90% of all collections are completed online, and SI operates a high-performance infrastructure that allows citizens to easily submit their payments through browser-based interfaces. Always available, high performing collections systems are crucial, since SI strives to simplify online payments to increase efficiencies through automation.

“Performance and operational stability have been major drivers for why we use Superdome servers. We’ve analyzed our batch processing on the HPE Integrity Superdome X Server and have already found up to ten-times improvement in system performance.”

— Vegard Skaret, Head of Technical Services Division, Statens Innkrevingsentral

“Most of the revenue we collect is not touched by employees, we rely on our infrastructure to provide a multi-language interface that allows us to efficiently collect fees,” says Vegard Skaret, head of Technical Services Division for SI. “We need fast and efficient storage and high-performance servers to process information quickly and accurately, and we need around-the-clock availability to ensure that our systems are available at all times to accept payments and to deliver self-service possibilities to any Norwegian citizen with a claim in our systems.”

Continuously improving server performance

SI operates its collection application on a very large Oracle database. A couple of years ago, SI deployed two Hewlett Packard Enterprise (HPE) Integrity Superdome 2 Servers with Intel® Itanium® 9500 processors running the HPE-UX 11i v3 operating system.

As the database continued to scale, SI sought to increase server capacity and performance. At the same time, SI’s management wanted to reduce server licensing costs. By moving to a standards-based x86 server platform, SI realized it could dramatically increase server performance while lowering costs. The introduction of Superdome X to the

market presented a new, attractive alternative because it was a standard x86 server yet it offered a comprehensive set of capabilities to ensure system reliability and availability. SI purchased an HPE Integrity Superdome X Server, configured it with Red Hat Enterprise Linux 7.0 and Red Hat Enterprise Virtualization, and initially deployed it in a testing environment.

The Integrity Superdome X Server is currently in production, and will soon replace the two Integrity Superdome 2 Servers. SI plans to purchase an additional Superdome X Server shortly to be deployed in a second data center. “We’ll have a balanced data center approach over two locations, and the Superdome X Servers will provide the performance and scale we need,” states Skaret. “The Superdome X offers fault tolerance and enables zero downtime, and that’s important to us. If our systems go down for a day, we could lose as much as 20 million Norwegian kroner in collections.”

He continues, “Performance and operational stability have been major drivers for why we use Superdome servers. We’ve analyzed our batch processing on the HPE Integrity Superdome X Server and have already found a ten-times improvement in system performance.”

Case study

Statens
Innkrevingsentral

Industry

Government

Customer at a glance

Hardware

- HPE Integrity Superdome X Server
- Intel Itanium Processor 9500 Series
- HPE Integrity Superdome 2 Server
- HPE 3PAR StoreServ 7440c Storage
- HPE 3PAR StoreServ V400 Storage

Software

- Red Hat Enterprise Linux 7.0
- HPE-UX 11i v3

HPE services

- HPE Proactive Care services

Upgrading storage infrastructure

SI also upgraded its storage infrastructure. SI had been relying on HPE XP24000 and HPE P9500 Disk Arrays deployed five years ago for storage, but these highly reliable, enterprise-class storage platforms were reaching the end of their support contract. SI needed to increase storage capacity, and looked for a more scalable storage solution that could also support demands for increased performance.

“We met with HPE Norway and evaluated our options, and then concluded that migrating to HPE 3PAR StoreServ Storage was a better option than buying additional support on our legacy storage platforms,” Skaret explains. “The numbers spoke for themselves; 3PAR StoreServ would allow us to more economically expand our capacity while supporting block and file storage and providing major advantages in flash-optimized performance and deduplication.”

SI selected two HPE 3PAR StoreServ 7440c flash arrays with a total of 120 TBs of flash storage. HPE 3PAR Thin Deduplication software with patented Express Indexing delivers selectively assignable and hardware accelerated inline deduplication without performance or scale consequences. It has allowed SI to deduplicate stored data on the HPE 3PAR StoreServ 7440c flash arrays by over 30%. Skaret says, “Our existing storage systems were nearing the end of their lifecycles, and we needed to improve performance while ensuring reliability, increasing capacity, and driving down costs. HPE helped us develop and implement a plan that is delivering ten times the performance at one-third the costs of extending our legacy systems while ensuring the reliability of our mission-critical infrastructure.”

“This was a strategic migration for us because of the performance improvement of the new flash-based storage systems and the capacity increases we deployed,” states Skaret. “The 3PAR storage architecture is also scalable and stable, which is very important to us.” An HPE 3PAR StoreServ V400 provides additional complementary storage, and the HPE XP24000 Disk Arrays have been redeployed in SI’s server room for development and testing purposes.

Leveraging professional services

SI is located in northern Norway—just below the Arctic Circle—so ensuring ongoing stability and maintenance is crucial. During the winter months, the airports may suffer from periods of bad weather conditions, which cause them to shut down. Obtaining spare parts or access to an expert technician can in these cases sometimes become problematic. That’s why SI relies on HPE Proactive Care services to help reduce operational complexity and streamline maintenance. It is a flexible, comprehensive, and cost effective service that combines smart technology and support to boost performance.

Proactive Care services integrate both proactive and reactive hardware and software support elements so SI can ensure uptime and stability while freeing up maintenance and operations time. “We need to avoid downtime at all costs, and we need to carefully plan firmware upgrades and maintenance programs to avoid errors and ensure ongoing operations,” says Skaret. “We’re extremely satisfied with the support and services HPE provides. We expect no less than 100% reliability, and we haven’t been disappointed.”

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