



## ENTERPRISE CONSOLIDATION SOLUTIONS

# SEB Vilniaus Bankas

### Company

SEB Vilniaus Bankas  
www.seb.lt

### Vertical Market

Financial Institution

### Key Challenges

- Increase competitive advantage
- Introduce new banking services more quickly
- Improve IT staff productivity
- Boost customer service
- Reduce bank data center costs

### Solution

- Consolidate core banking applications from 60+ Sun and Fujitsu servers in 18 data centers to two fully-redundant, centralized Sun Fire 12K servers
- Configure three Dynamic System Domains on each Sun Fire 12K server, for core banking, data warehouse, and an executive information system
- Implement storage area network (SAN) with Sun StorEdge™ 9970 systems and Sun StorEdge L700 tape libraries

### Business Results

- Gained a competitive advantage by introducing new banking products more quickly and ensuring service availability
- Accelerated application troubleshooting, improving the bank IT group's service to branches
- Reduced platform costs and manpower requirements by 20 percent

## Leading Eastern European Bank Introduces New Services More Rapidly and Cuts Management Costs by 20 Percent by Consolidating to the Sun Fire™ 12K Server Platform

Among the first private commercial banks in Lithuania, SEB Vilniaus Bankas, formerly Vilniaus Bankas AB, has led the country in introducing innovative banking services to Lithuania since its establishment in 1990. For example, SEB Vilniaus Bankas issued the first Visa Classic payment card in Lithuania in 1993. The following year the bank joined the Society for Worldwide Interbank Financial Telecommunication (SWIFT) and expanded its customer service network to 12 branches. In 1995, when the bank initially received international funding, it set up two subdivisions to introduce Lithuania's first financial brokerage and leasing services. SEB Vilniaus Bankas is the only bank in the country that belongs to Euroclear, an international securities clearing and settlement system.

### The old way: distributed data centers

Until 2003, each of the bank's 18 branch offices had its own data center. Every data center housed multiple servers used for core banking applications such as intranet access to the payment card system, loan payment processing, and self-service banking via the Web and interactive voice response (IVR). Other servers were used for business applications such as internal accounting, Lotus Notes, data warehousing, and reporting for sales, marketing, and risk management. In total, SEB Vilniaus Bankas' IT Operations group supported more than 60 decentralized servers from Sun Microsystems and Fujitsu.

The decentralized configuration raised costs and hindered the bank's competitiveness. For example, any new banking services or features that SEB Vilniaus Bankas developed had to be deployed and tested 18 times, once for each data center, delaying the introduction of the service to customers and raising development costs. Software updates had to be installed separately in each data center.



Troubleshooting or installing a new application or feature meant dispatching an IT staff member to the site, sometimes requiring travel to the other side of the country. Tasks that required looking up customer information from another branch's data center, such as a balance inquiry from a location other than the customer's home branch, were sluggish because the request had to be routed between branches over low-speed connections. Finally, the bank incurred high capital and operational expenses for the purchase, management, and maintenance of dozens of servers as well as for direct-attach storage.

## The Sun Fire 12K server supports up to nine fault-isolated Dynamic System Domains, which can be reconfigured while applications are running.

### **Solution: data center consolidation**

To improve its competitive advantage and cut costs, SEB Vilniaus Bankas decided to consolidate its branch data centers into two fully-redundant, centralized data centers. "Financial institutions retain and attract customers based on customer service," says Jonas Gudmundsson, director of IT operations. "By transitioning from decentralized to centralized data centers, we realized we would be able to introduce new banking products more quickly, and therefore gain a competitive advantage. We would improve service availability and quality both by using newer, more reliable hardware and by freeing up time to test new services and features more extensively. Finally, we'd cut data center costs and staffing requirements."

### **Server criteria: performance and availability**

When evaluating potential server platforms for the redundant, centralized data centers, SEB Vilniaus Bankas considered both the Sun Fire 12K server and a server from Fujitsu, which provided the legacy core banking platform. "Our primary selection criteria were server performance and availability," says Gudmundsson. "We needed the performance to support peak transaction volumes, as well as rapid failover so we could maintain service continuity in the event of a hardware or application outage in one data center."

Based on these criteria, SEB Vilniaus Bankas selected the Sun Fire 12K server. "The Sun Fire 12K server definitely offered the best price and performance," says Gudmundsson. Other factors in the selection included the reliability of both Sun's server and Sun's Solaris™ Operating System, the availability of

certified application and databases, and the presence of local Sun partners who could provide maintenance services. "Our past experience using Sun's servers for individual business applications gave us confidence in the quality of Sun's maintenance and support from our local partner," Gudmundsson notes.

Before finalizing the purchase, SEB Vilniaus Bankas engaged Dimension Sweden, now Proact, a Sun partner, to conduct a benchmark to confirm that the proposed configuration met performance expectations. With the sizing confirmed, consolidation began.

### **Fully redundant data centers**

Compservis Atvirostos Sistemos, a local subsidiary of Dimension, deployed two Sun Fire 12K servers, one each in two fully redundant data centers. The partner also deployed redundant storage area networks (SAN) with

Sun StorEdge 9970 systems and Sun StorEdge L700 tape libraries, replacing the previous direct-attach storage. "Consolidated storage provides the same benefits as a consolidated server platform: greater cost-effectiveness and better manageability," says Gudmundsson. "We chose the Sun StorEdge software because it provided the best performance at the lowest price." The fully redundant data centers connect to each other via high-speed fibre optics, facilitating rapid failover in the event of a server or application outage.

In addition to Sun Fire 12K servers, SEB Vilniaus Bankas utilizes Sun Fire V440, Sun Fire V880, Sun Fire 280R, and Sun Enterprise™ 250 servers for business applications such as Lotus Notes and reporting. Each SEB Vilniaus Bankas branch connects to both data centers over the wide area network (WAN).

SEB Vilniaus Bankas received the servers from Sun in June 2003 and its data center went live just two months later, in August 2003. Gudmundsson attributes the rapid deployment to joint planning and close cooperation among the SEB Vilniaus Bankas project group, Compservis Atvirostos Sistemos, and the Sun Finland office. "All groups worked together to deploy the infrastructure in a tight time frame," he says. "As a result, we were able to roll out our new centralized business model according to plan."

### **Dynamic system domains**

Initially, each Sun Fire 12K server was configured with three Dynamic System Domains for core banking, a data warehouse, and an executive information system used by branch managers. "When we first consolidated our servers, we needed more temporary capacity for our core banking system," says Gudmundsson. "The Dynamic System Domain feature of the Sun Fire 12K server allowed us to transfer unused processors from another domain, avoiding the capital expense of another server."

“Consolidating to the Sun Fire 12K server platform and Sun StorEdge 9970 system reduced our IT labor requirements by 20 percent because we no longer have to travel to data centers spread throughout the country for troubleshooting and management. Now all our servers, storage, and applications are in one place, which gives us greater control over quality.”

**Jonas Gudmundsson**

Director of IT Operations,  
SEB Vilniaus Bankas

In 2005, SEB Vilniaus Bankas added a fourth domain to process electronic statements that customers and bank customer service representatives can access via the Internet banking system. “Before we consolidated on the Sun Fire 12K server platform, adding the electronic statements capability would have meant purchasing and maintaining a new dedicated server,” says Gudmundsson. “With the Dynamic Reconfiguration capability of Sun Fire 12K servers, we just pulled in unused processors from other domains and added an I/O board. This cut our costs by approximately 35 percent compared to purchasing a new server and support agreement.”

**Improved customer service**

Consolidating from multiple, distributed core banking servers to a single Sun Fire 12K server has improved the bank’s competitive advantage. Developing new self-service banking tools for the Web and telephone banking is faster and costs less, a result of centralized support and maintenance and faster trouble-shooting. Products can be tested more thoroughly when they reside on just one server, resulting in greater reliability and better performance. “Excellent services and high availability strengthen customer loyalty,” Gudmundsson notes.

**Simplified data center management**

Consolidating to the Sun Fire 12K server has also simplified the bank’s data center management. IT has been able to standardize its server management processes, eliminating variations that arose when each branch had its own data center. This increases quality, reduces platform costs, and shrinks manpower requirements, ultimately increasing the bank’s profit margin.

Server and storage maintenance costs dropped immediately and significantly as a result of consolidation. “Consolidating to the Sun Fire 12K server platform and Sun StorEdge 9970 system reduced our IT labor requirements by 20 percent because we no longer have to travel to data centers spread throughout the country for troubleshooting and management,” says Gudmundsson. “Now all our servers, storage, and applications are in one place, which gives us greater control over quality.”

Gudmundsson notes that consolidation provided other business benefits that are difficult to measure and yet are equally important to the bank’s business success. Redundancy and greater availability, for example, increase customer trust. “The most important business advantage from Sun’s server and storage consolidation is that we gained the ability to offer services that are simply not possible in a decentralized environment, such as online account opening and cash management,” he says. “More services, introduced in a quicker fashion, strengthen the SEB Vilniaus Bankas brand and differentiate us from the competition.”

**Learn More**

For more information on SEB Vilniaus Bankas, visit [www.seb.lt](http://www.seb.lt). And for more information on Sun's Enterprise Consolidation Solution, please visit [www.sun.com/datacenter/consolidation](http://www.sun.com/datacenter/consolidation)

**Sun Technology**

- Solaris 8 Operating System
- Solaris 9 Operating System
- Sun Enterprise 250 servers
- Sun Fire 12K servers
- Sun Fire 280R servers
- Sun Fire V440 servers
- Sun Fire V880 servers
- Sun StorEdge 9970 platforms with 3.2 terabytes a piece
- Sun StorEdge L700 tape libraries