



## ENSURING THE STABILITY OF GEORGIA'S FINANCIAL SECTOR



საქართველოს ეროვნული ბანკი  
National Bank of Georgia

### CUSTOMER

NATIONAL BANK OF GEORGIA

### WEB SITE

WWW.NBG.GOV.GE

### INDUSTRY

FINANCIAL SERVICES

### LOCATION

TBILISI, GEORGIA

### KEY CHALLENGES

- Provide continuous services even in the event of a disaster
- Go to a more innovative and flexible IT infrastructure

### SOLUTION

The National Bank of Georgia built a third DR data center with VMware vSAN 6 and VMware vSphere

### BUSINESS BENEFITS

- A fast and reliable solution
- The customer can easily scale the infrastructure
- Rapid and effective implementation

The National Bank of Georgia (the NBG) is the central bank providing services to commercial banks. Any failure in the operation of its data center may result in downtime for critical services provided to financial institutions throughout the country. To mitigate this risk, NBG is implementing various modern technologies that contribute to high availability of its services. One of the major achievements in this direction was the implementation of a third disaster recovery data center based on VMware vSphere® virtualization and VMware vSAN™ shared storage.

Despite the physical distance between the new data center and the core one, its implementation was fast and effective. Thanks to vSAN, the National Bank of Georgia has built a scalable hyperconverged infrastructure not bound to a specific hardware vendor, supporting instant policy changes. Considering its benefits, NBG will consider expansion of VMware solutions and vSAN to the core datacenters during the future upgrades.

The National Bank of Georgia was the first organization in the country to use vSAN for building a DR data center.

The National Bank of Georgia (NBG) is the central bank of Georgia. Its status is defined by the Constitution of Georgia. The main objective of the National Bank is to hold, keep and dispose the international foreign reserves of the country, and carry out monetary policy. The National Bank exercises supervision over the financial sector for the purposes of facilitating financial stability and transparency of the financial system, as well as for protecting the rights of the sector's consumers and investors. The NBG is responsible for performing and disseminating financial and external sector statistics in accordance with international standards and methodologies, and also for the effective and proper functioning of payment systems.

### Problems and Challenges

All the payment transactions in the national currency of Georgia (The Lari) between the Georgian commercial banks and its customers are processed by NBG's Real Time Gross Settlement (RTGS) System. If its systems experienced even the shortest outage, the bank-to-bank business among more than 15 commercial banks would be stopped. Furthermore, the NBG bears responsibility for the correct operation of payment systems and is a banker and fiscal agent of the government.

One of the priority tasks of the NBG IT team is ensuring the continuity of the bank's business processes. The construction of the third disaster-proof data center for DR was one more step towards cutting-edge modern technologies that improves service availability and quality. An easy-to-manage, scalable and

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IVANE JAVRISHVILI  
CIO, HEAD OF IT DEPARTMENT  
NATIONAL BANK OF GEORGIA.

#### VMWARE FOOTPRINT

- VMware vSAN 6
- VMware vSphere 6.5

#### PARTNER



HT SOLUTIONS

"We use innovation to achieve NBG's mission effectively and efficiently, also to fortify the confidence in the National Bank of Georgia to other participants in the financial sector. The new data center, as well as core ones is a great example of our vision for reliability and agility".

GEORGE MELASHVILI  
CEO  
NATIONAL BANK OF GEORGIA.

high-performing DR data center guarantees the availability of the necessary computing power in case operations in the core data center are halted.

#### Solution

When analyzing the market of DR data center solutions, the most important criteria for the bank's experts was cost efficiency, performance and agility. During selection and tender process HT Solutions, the leading IT consulting company in Georgia, suggested VMware vSAN — the fastest growing HCI solution in the industry, one of the three leaders of the Gartner's Magic Quadrant for Hyperconverged Infrastructure. Based on the fare tendering process, vSAN was selected for the third data center.

Because the National Bank of Georgia already uses VMware solutions for server virtualization, this option was the optimal one. Moreover, not being bound to a specific hardware vendor avoided an increase in infrastructure complexity and additional costs of retraining staff.

"An important advantage of vSAN is that it uses standard x86 servers, so the customer can easily increase performance and scale the infrastructure. The solution supports any applications, which guarantees maximum flexibility and rapid implementation of changes," said Sandro Galdava, Technical Director, HT Solutions.

The disaster-proof data center was set up in the Georgian City of Batumi, 350 km from the core data center. vSAN was implemented on standard Dell servers. With the support of HT Solutions, the project was completed in the shortest possible time by the fall of 2017. The National Bank of Georgia was the first organization in the country to use vSAN for building a DR data center.

#### Results and Business Advantages

The NBG experts regularly test switching to the DR data center to make sure the system is working. In case of a cyber-attack, a system failure or a natural disaster, this backup data center located at a significant distance will take on all the necessary workload. Thanks to this, the processing of transactions between commercial banks throughout the country won't be interrupted.

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The customer notes that the modern approach to IT allows the organization to confidently deliver on its main mission of ensuring the stability of the country's financial sector.

"We use innovation to achieve NBG's mission effectively and efficiently, also to fortify the confidence in the National Bank of Georgia to other participants in the financial sector. The new data center, as well as core ones, is a great example of our vision for reliability and agility," claims George Melashvili, CEO, National Bank of Georgia.

#### Looking Ahead

The customer will consider expansion of hyperconverged infrastructure based on VMware solutions and vSAN to the core datacenters during future upgrades.

