CASE STUDY

Ural Bank for Reconstruction and Development

The largest bank in Ural Region of Russia, The Ural Bank for Reconstruction and Development (UBRD) is listed among Top 30 Russian banks by Central bank of Russia. UBRD takes the client focus as the primary competitive advantage, and its extensively growing network in 2019 covers 57 Russian regions serving more than 44,000 corporate and 960,000 retail clients. This requires a comprehensive high-quality client data handling and management together with a more rational approach to investing in IT. To outperform the competition, UBRD strengthened its IT infrastructure with Pure Storage All-Flash Array.

Business Transformation

Pure Storage technology improved the bank's business productivity and optimized hardware costs, thanks to broader functionality and impressive deduplication and compression ratio. Moreover, Pure's leading-edge infrastructure and the All-Flash Array solution itself helped UBRD save three times more on the amount of data, which had a significant economic effect. Pure also allowed to strengthen the reliability of UBRD bank services.

Challenges

- A constant increase in the volume of Oracle databases required both high storage performance and high availability of backup solution for productive systems.

- From a technical and operational point of view, the bank as an institution had a strict set of performance and compliance requirements to meet.

- A new storage solution needed to provide all technical requirements with a minimum cost for UBRD to make its IT infrastructure cost-effective.

Ural Bank
for Reconstruction and Development

Geo
The Ural region, Russia

Industry
Banking/Finance

Company
The Ural Bank for Reconstruction and Development (UBRD)
www.ubrr.ru

Use Case
- Data storage platform modernization.
- 2 FlashArrays x70r2 were integrated into the existing infrastructure.

> "This project showed that Pure Storage solutions provided an excellent platform for today's digital IT infrastructure. High data reduction ratio helped UBRD to obtain a significantly bigger data storage capacity than was originally planned without additional cost. And that was high speed and reliable capacity."

VLADIMIR BELYAEVSKY,
HEAD OF STORAGE SYSTEM,
JET INFOSYSTEMS

Solution Benefits

- The All-Flash Pure array reached a deduplication and compression ratio of up to 12:1 (instead of the expected 3.5:1), which had a significant economic effect.

- The company has gained new features (not available before the Pure solution): UBRD developers get test databases 50% faster, which reduces the new products deployment time by 10%.

- Pure Storage helps reduce the cost of data storage associated with the growth of database volumes.

The Largest Bank of Ural Region Of Russia Seamlessly Handles its Growing Sizeable Client Data With Pure All-Flash Array

Retaining the status of the main digital bank in the region, the Ural Bank for Reconstruction and Development (UBRD) is consistently implementing its IT transformation strategy. Today, its IT infrastructure must embrace all the needs of the rapidly growing business: the volume of customer data is increasing by 20-30% per year, and system performance is systematically doubled. In such circumstances, the bank's previous storage platform would not be able to fully meet UBRD expectations.

"The quality of customer service is the key factor in the need to modernize the IT infrastructure and business processes of the bank. Today's realities are forcing us, on the one hand, to take a more rational approach to investing in IT, and on the other hand, to squeeze the maximum out of them. Moreover, it is the IT infrastructure that is the foundation in building the digital banking ecosystem, so it ultimately affects the quality of customer service," said Andrei Obukhov, managing director of the IT department at UBRD.

Therefore, the bank decided to address data storage technology leaders. This decision was prompted by an increase in the volume of databases requiring high performance and the availability of backup hardware for productive systems. For instance, to close the current tasks, the bank needed a system that could provide the required amount of IOPS with a response time of less than 0.5 ms. for sizeable databases.

"The bank has reached the stage when infrastructure problems are no longer being solved by traditional methods. It needs to deploy new technologies and try new approaches. By consolidating our knowledge and experience in the field of data storage, we were able to implement the optimal solution, satisfy

PURESTORAGE®

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>
> **ANDREI OBUKHOV,** MANAGING DIRECTOR OF THE IT DEPARTMENT AT UBRD

current needs and provide growth opportunities for the bank," said Vladimir Belyaevsky, head of storage system, Jet Infosystems.

Time To Choose The Effectiveness Proven By Practice

As a first step to improving productivity, reliability and optimizing hardware costs, UBRD integrated Pure All-Flash array into its IT infrastructure. Prior to Pure, the bank used a solution that couldn't meet UBRD's needs of working with snapshots. It also lacked deduplication.

During our evaluation we considered all major Storage vendors and decided to add Pure to the list. And, according to Andrei Obukhov, managing director, IT Department, UBRD, the preferred platform, when it comes to storage, servers, network components and hypervisors, should be proven by practice.

UBRD has put high bar of performance for its new platform. However more than just performance the bank needed a reliable leading-edge solution enriched with comprehensive Enterprise Data Services. At the same time, Storage solution that meet all the technical criteria should be the most affordable by TCO. Each storage solution was evaluated by functionality, price per usable effective gigabyte and performance, and Pure with its Evergreen Storage program won in all these parameters.

"Performance was not an issue for all major vendors for their Top Storage Platforms, but given actual deduplication, the Pure Storage solution turned to be much more effective, and Pure FlashArray resilience was a kind of our astonishment as well," - explained Vladimir Belyaevsky, head of storage system, Jet Infosystems.

The main advantages of Pure Storage for UBRD were the deduplication rates on real data, rich Data Services, simple usage and highest reliability in its class – 99.9999% uptime that is reachable only by High-End Storage. Thorough Proof-of-Concept of Data Storage deployed at the client infrastructure in Ekaterinburg, Russia, and practical use helped to identify the above differentiators and make the final choice in favor of Pure.

Moreover, all-flash technology was a necessary requirement from the very beginning of the procurement process – and Pure Storage FlashArray provided required several thousand IOPS under heavy workload profile of the bank at ultra-low latency below 1 millisecond. In addition, Pure ActiveCluster enabled zero RTO / RPO making live Disaster Recovery solution in active-active mode. Beauty of Pure is that ActiveCluster works out-of-the box and does not require any Software or Hardware purchase.

> "And, most importantly, Pure Storage helped to reduce the cost of data storage associated with the growth of database volumes."

ANDREI OBUKHOV, MANAGING DIRECTOR OF THE IT DEPARTMENT AT UBRD

Exceeding Expectations With An Incredible Performance

According to Andrei Obukhov, managing director of the IT department at UBRD, Pure solution was deployed above expectations, fully integrated with the existing infrastructure. A Pure 100% NVMe FlashArrays //X-series is a core storage platform of the bank. Snapshots are very easy to use without impact on performance, thus enabling our Developers to do faster.

Moreover, the array reached data reduction ratio up to 12:1 (3.4x above the guaranteed by Pure 3.5:1) resulting in a significant economic effect from Pure Storage Solution. In fact, UBRD managed to save three times more on the amount of data. And there were other benefits gained by the bank from Pure innovative storage platform.

"UBRD has gained new features that were not available before the Pure deployment: our developers began to test databases 50% faster, which reduces the time for introducing new products by 10%," – said Andrei Obukhov, managing director of the IT department at UBRD.

"And, most importantly, Pure Storage helped to reduce the cost of data storage associated with the growth of database volumes. The project allowed us to strengthen the reliability of bank services," - said Andrei Obukhov, managing director of the IT department at UBRD.

In the future, the bank plans to transfer the bulk of its critical IT infrastructure to a new all-flash platform. According to Vladimir Belyaevsky, head of storage system, Jet Infosystems, because of three definite advantages of Pure solutions, that are data reduction without sacrificing performance, high-end resiliency and ease of management.

"This project showed that Pure Storage solutions provided an excellent platform for today's digital IT infrastructure. High data reduction ratio helped UBRD to obtain a significantly bigger data storage capacity than was originally planned without additional cost. And that was high speed and reliable capacity" said Vladimir Belyaevsky, head of storage system, Jet Infosystems.