

## **ACVILIN-GRUP**

Building a scalable server platform based on servers and new-generation HPE Storage, using the software solution for VMware virtualization, and integration of the existing server capacities in a new infrastructure.

The growing demand for compute capacity, centralized management and system monitoring, as well as the need to increase the disk space to store the database with the ability to access it in 24/7 mode from a variety of branches and representative offices throughout the country were the main factors that encouraged Acvilin-Grup to upgrade the existing infrastructure.

One of the main goals was to not only to build a new, more productive IT information infrastructure, but also the possibility to expand it further with minimal investment in the first phase.

## Implementation

In pursuance with the objectives set, the architecture of the new system was designed based on the latest servers and Enterprise Storage manufactured by HPE.

HPEMSA2040 storage system with FCSAN connectivity was used as a central storage. The main MSA2040 features include not only a variety of connection options to SAN infrastructure, but also the flexibility to further increase the disk space when needed. It is possible to add in the ON-LINE mode fast SSDENT disk drives and SASMDL high-capacity disks (various packaging).

In its launch configuration the Storage was supplied with SAS 15k ENT discs for database storage and processing as well as with SASMDL 7.2k discs for storage of files and data backups. This Storage is configured in such a way that all virtual servers store and run with it, which makes it possible, in the event of failure of one of the physical servers, to run the virtual machines at another server / servers in a predetermined mode.

Availability of eight ports for FC 8Gb connection in MSA2040 basic configuration allowed to connect new and existing servers directly to the Storage without additional FC SAN switches, which significantly reduced the customer's expenses at this stage. In the future, the customer has the possibility to add these switches when necessary, which will allow him to connect additional servers and backup all connections, and exclude the loss of communication between servers and the Storage.

The new server platform was created on the basis of HPE ProLiant DL360 Gen9 servers, which were the flagships of the global server market

The emphasis was placed on the extended memory capacity required for parallel start of several virtual machines, as well as on the processor resources in order to increase the overall performance of the servers.



Acvilin-Grup Holding is a leading distributor of consumer goods and office furniture.

The Corporation successfully operates on the Moldovan market since 1997, using the advanced experience of foreign and domestic partners.

Cooperating with such world famous manufacturers as Philip Morris International, Nestle, and many others, the Company has gained a reputation of a reliable and trustworthy firm.

"....We thank the S & TMold staff for professionalism, expertise, and flexible approach to the tasks set within the framework of our strategic construction and development of the computing infrastructure.

The highest level of technical support provided by S & TMold, allows us to be confident in the future and gives us possibility to work with maximal efficiency on local market in company's main activities, providing our customers with the required level of service ...."

Dmitry Krivosheev, IT Manager, Acvilin-Grup





Running of virtual machines directly from the Storage allowed to completely reject the inner discs, which significantly reduced the cost.

It should be noted that the proposed solution architecture permitted to limit with the acquisition of additional HBA FC 8Gb adapters to connect to a new infrastructure of servers, which the customer already had (HP servers of previous generations G5 / G6 / G7).

This allowed to "redraw" available server capacities in the context of their transfer in virtual address mode, and consequently, maximize the computing resources without additional investments.

VMware solution was chosen as a platform for virtualization, which ensured reduction of IT costs, whilst the utilization efficiency and flexibility of the existing IT assets increaseed.

## Outcomes

The following tasks set by the client before S&TMold were implemented during the project:

- creation of a modern scalable server infrastructure and a centralized storage system;
- organization of fail-safe operation of servers by using virtualization technology;
- ability to use the existing customer's servers in order to preserve former investments;
- balanced use of compute capacity and centralized disc space.



S&T was established in Moldova in 1995, as a company representing the Austrian company S&T System Integration&Technology Distribution AG.

Today S&T Mold is a leading provider of IT solutions and services on the Moldovan IT market, as part of the S&T international group of companies that also operates in the Central and Eastern Europe and in the CIS.

S&T Mold provides customers with comprehensive high-end solutions, including those provided by our strategic partners - leading corporations, such as Hewlett-Packard, Cisco Systems, Microsoft, Oracle, VMware, EMC, Barracuda, Check Point, and APC.

We provide system integration services, including:

- consulting;
- development and project management;
- solutions implementation and commissioning;
- user training;
- warranty and post-warranty service.

We have years of experience and a balanced product portfolio, and can therefore come up with the best IT solutions for financial and communications companies, public agencies, industrial companies and retail networks.