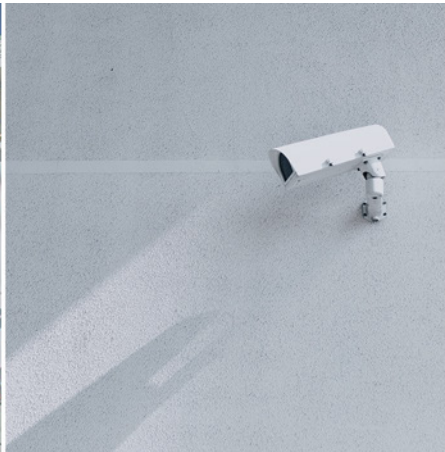


SAINT PETERSBURG MINING UNIVERSITY. SANATA SYSTEM: RAIDIX BASED DATA STORAGE SOLUTION



In order to ensure safety, many University facilities, including dormitories and utility rooms, are equipped with surveillance cameras.

Mining University is the first technical university in Russia, that educates specialists in the fields of industrial and civil engineering, energetics, oil and gas industry, mining machinery manufacturing, economics and others.

University graduates are employed by Alrosa, PBm Gazprom oil, Lukoil, Metall Group, Novatek, Norilsky nickel, Russian copper company, Surgutneftegaz, Total, Uralkaliy, FerbundnetsGaz, FOSAGRO and the other large Russian enterprises.

Challenge

Scientific and research center of the Mining University is located on the territory more than 240 thousand sq. m and includes scientific and educating centers, core facilities and more than 60 labs.

In order to ensure safety, many University facilities, including dormitories and utility rooms, are equipped with surveillance cameras. With the growth of surveillance network, it is necessary to store and process more volume of the video.

Prior to implementing RAIDIX based SANATA storage, IT department of the University utilized hardware storage systems and faced obvious difficulties with data management, allocation of volumes and storage sections, as well as scaling of the existing system.

The main request of the University was to ensure flexible software and hardware infrastructure for storing and efficient processing of several concurrent video streams (coming from several hundreds of video cameras) with the high productivity and reliability.

Mining University announced a tender for storage system supply, and IT department eventually made a decision in favor of cumulative SANATA storage, based on the advantages, both functional and commercial.

Solution Provider

Russian system integrating company VIT (VIT-Center LLC) was chosen as the supplier of the complex solution for security control. The company creates and services information systems for various companies and business segments.

Among the key business dimensions of VIT company: in-house manufacturing of highly reliable PROF-IT servers, SANATA storage systems, V-BOX workstations, and industrial calculation platforms.

Solution

As part of the project for surveillance infrastructure service at various facilities of the Mining University, VIT company shipped 12 SANATA storage systems with total storage volume around 1PB.

As part of the project for surveillance infrastructure service at various facilities of the Mining University, VIT company shipped 12 SANATA storage systems with total storage volume around 1PB. The package included more than 30 servers, equipped with cost-efficient SATA-drives.

RAIDIX managing software for SANATA storage is high-performance technology, based on the advanced algorithms of erasure coding, used for surveillance. When applied at the standard server hardware, RAIDIX technology ensures the best cost-quality ration of the solution for the end user.

The project resulted in RAIDIX ensuring high-speed processing of the multiple concurrent video streams from more than 700 cameras in the 7 University facilities — with no frame losses or speed reduction.

"RAIDIX based SANATA storage used for surveillance at the Mining University facilities shows maximum production during multithreaded mode and ensures data integrity due to high reliability. Adding to that, RAIDIX allows flexible scaling of the system according to changing system requirements and load".

Alexander Dmitriev,
General Manager, VIT

Moreover, VIT and RAIDIX guarantee prompt and comprehensive service support. This was one of the key requests, provided by the IT department of the University during the tender procedure.

Business impact

SANATA storage has been continuously employed by the Mining University since 2011. University continues to expand the area under surveillance coverage and intensify storage hardware. VIT regularly upgrades hardware and software, ensuring access to the most advanced storage technologies and new RAIDIX features.