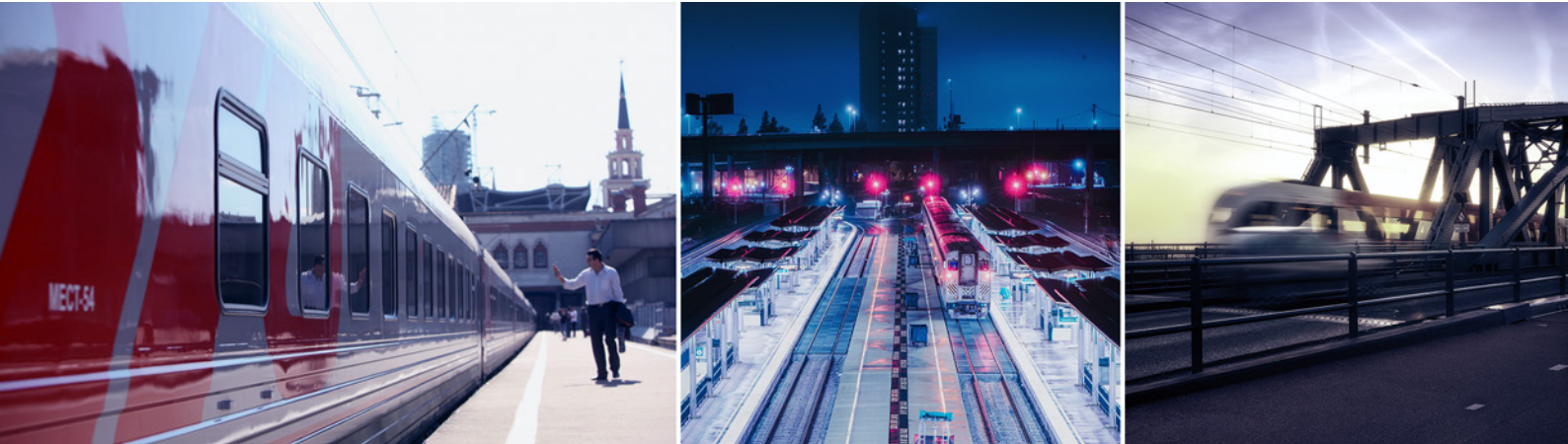


RAIDIX DATA STORAGE SYSTEM FOR RUSSIAN RAILWAYS



RAIDIX has delivered an integrated data storage solution for backup and virtualization to JSC "Russian Railways". Active project-flow involved 12 months of implementation, customization and personnel training. At this point, RAIDIX provides continuous system maintenance and technical support to Russian Railways.

«Russian Railways» keeps their critical assets safe by using RAIDIX storage for backup and virtualization.

JSC "Russian Railways" is listed among the top three railway companies in the world. It's a state-owned transport organization that covers 26.4% of passenger flow, 45.3% of cargo turnover (2016) and 85,200 km of railroads in the Russian Federation. Russian Railways encompasses 16 regional branches, each of them hosting an I&C Center.

The Main Computer Center is located in Moscow. Russian Railways runs three data centers in Moscow and two more at the I&Cs of Oktyabrskaya and Sverdlovskaya railway branches. Regional offices employ versatile software systems.

Challenge

Configuring fast and reliable backup

Russian Railways operates under high workloads and has to limit its regular backup operations to the night time. The standard duration is between two to eight hours depending on specific hardware and current tasks. Aside of high performance, the company requires optimal reliability of copy operations and fast data reading.

The customer specified the task of archiving from multi-purpose siloed IT systems: corporate email, unified payment system, I&C system, etc. Compatibility with existing software infrastructure (Windows, MAC OS, Linux, Solaris and HP-UX OSs as well as NetBackup and Veeam Backup software) was another critical requirement for the potential solution provider.

As part of the tender process, Russian Railways reviewed several competing solutions, including HP EVA data storage. As a result, RAIDIX was announced outright winner based on functional benefits as well as cost-effective offering.

Russian Railways was looking for a reliable fault-tolerant data storage system with minimal recovery time (RTO) and recovery point objectives (RPO).

Virtualization of the I&C system

Russian Railways required a standard hardware suite to support infrastructure virtualization in the regional I&Cs. On top of the priority list, the customer emphasized robust reliability and full compatibility with VMware.

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Solution

RAIDIX delivered a failure-resistant storage with reliable backup, fast data access and archiving from siloed IT systems. The solution met RTO and RPO requirements and effectively addressed high workloads.

RAIDIX delivered a total of 80 single-controller data storage systems to the customer's data centers. All systems provided the capacity of 10TB and used the mirroring technology. Besides, RAIDIX team performed a hardware upgrade for optimal performance, added new functionality and integration with Active Directory.

The RAIDIX data storage system met the high standards and requirements of Russian Railways, enabling fault-tolerance storage, centralized data archiving from the siloed IT infrastructure and full support for the third party software.

The project comprises the following milestones:

1. Delivery to datacenters

On stage one, RAIDIX configured and delivered RAIDIX-powered hardware to Russian Railways data centers, and performed post-delivery fine-tuning and on-site personnel training. The total delivery batch included 80 single-controller data storage systems.

2. Delivery to I&C centers

On the next step, RAIDIX shipped 36 fault-tolerant two-controller systems, 16 disks each. All storage systems come with the capacity of 10TB and mandatory mirroring. This delivery catered to virtualization of Russian Railways' IT infrastructure.

Within a month's time, all data storage systems entered into service. After delivery and hardware configuration, RAIDIX team members organized on-site training workshops for employees of the regional I&C Centers and the Main Computer Center.

3. Maintenance and updates

On stage three, RAIDIX engineers performed equipment and software upgrade, as well as Active Directory integration. In the maintenance period, RAIDIX commits to full support of the implemented RAIDIX-based storage solution, including regular updates and customization according to evolving customer challenges. RAIDIX software upgrades allow for increased storage reliability and performance in line with the growing IT infrastructure of Russian Railways.

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Business impact

The comprehensive solution by RAIDIX has secured data integrity and smooth workflow of the extensive Russian Railways office network. RAIDIX-based SDS fully caters to high workloads and stringent customer requirements in part of high operational speeds and data availability 99,999.

At present, the RAIDIX team provides consistent project maintenance and all-round consultancy on software and hardware issues.