

Metalloinvest prepares SAP environment for Industry 4.0 with Red Hat



Metalloinvest is Russia's largest mining company. To create a foundation for Industry 4.0, the manufacturing industry's shift toward automated, data-centric operations, the company sought to integrate and optimize its complex SAP environment. With help from its managed services provider, JSA Group, Metalloinvest adopted Red Hat Enterprise Linux for SAP Solutions as its operating system foundation. The company can now take advantage of comprehensive data insight and predictive risk analytics to ensure reliable, stable performance across its critical systems as it prepares to digitize its production environment.

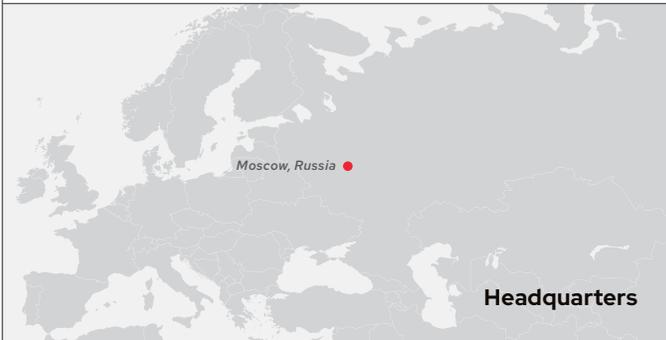
Software

Red Hat® Enterprise Linux® for SAP Solutions

Red Hat Smart Management (formerly Red Hat Enterprise Linux Smart Management Add-On)

Red Hat Satellite

Red Hat Insights



Mining

62,000 employees

Benefits

- Improved reliability and performance for critical operational systems
- Gained comprehensive data insight with better SAP integration, creating foundation for move to Industry 4.0
- Reduced risk with security management and comprehensive support

“Red Hat Enterprise Linux for SAP Solutions is the best option as the basis for the SAP landscape that we provide and support for Metalloinvest, because it establishes a fault-tolerant, high-performance infrastructure.”

Konstantin Zelenkov
Chief Technology Officer,
JSA Group



facebook.com/redhatinc
@RedHat
linkedin.com/company/red-hat

redhat.com

“While we want to be as self-sufficient as possible, the best way to optimize a solution is by working with, and learning from, the solution provider. Having Red Hat working alongside us, speaking the same language, was essential while working on such critical systems.”

Konstantin Zelenkov
Chief Technology Officer,
JSA Group

Evolving to automated, digital-centric production

Metalloinvest is the largest mining company in Russia and the second-largest mining company in the world. With a net worth of US\$6 billion and 62,000 employees, the business is both operationally and geographically massive. It holds proven reserves of 14.1 billion tons of iron ore and manages facilities across Russia, with plants for steelmaking, mining, smelting, and more.

After decades of operations, Metalloinvest faced a new challenge: Industry 4.0, the manufacturing industry’s shift toward automated, data-centric operations. By automating and digitizing production, the company aims to operate and use resources more efficiently. Its goal is to become not only the biggest mining company in the world, but also the most productive.

The technology core of Metalloinvest’s operations is SAP S/4HANA®, an enterprise resource planning (ERP) platform, running on IBM Power Systems and Intel x86 hardware. This platform manages a variety of processes and tasks, from plant maintenance and logistics to payroll and sales. It is managed by JSA Group, the third-party IT service provider to Metalloinvest and its companies.

“Integration is challenging in such a complex IT landscape,” said Konstantin Zelenkov, Chief Technology Officer of JSA Group. “We want to establish a powerful, stable, and cost-effective operating layer that will provide agility for Metalloinvest’s individual companies and support digital transformation for the entire group to Industry 4.0.”

Building an operating system foundation for SAP success

To create a robust, enterprise foundation for its SAP S/4HANA environment, Metalloinvest and JSA Group chose Red Hat Enterprise Linux for SAP Solutions. When the project began, Red Hat Enterprise Linux for SAP Solutions was yet to be certified on IBM Power. Metalloinvest did explore SUSE Linux distributions as an alternative during the project’s test and development stages but quickly decided to wait for Red Hat at the production stage.

“Red Hat Enterprise Linux for SAP Solutions is the best option as the basis for the SAP landscape that we provide and support for Metalloinvest, because it establishes a fault-tolerant, high-performance infrastructure,” said Zelenkov. “We’re also looking at adding private cloud and network automation capabilities in the future, and Red Hat’s solutions and roadmap provide a plan for innovative new business initiatives.”

Co-engineered by Red Hat and SAP, Red Hat Enterprise Linux for SAP Solutions includes Red Hat Insights for predictive data analytics and Red Hat Smart Management (formerly Red Hat Enterprise Linux Smart Management Add-On) to simplify management of Red Hat Enterprise Linux environments through Red Hat Satellite and cloud management services.

This single subscription combined the reliability, scalability, and high-performance capabilities of Linux with technology that meets the specific requirements of SAP applications.

Metalloinvest now runs its entire SAP S/4HANA production environment on Red Hat Enterprise Linux for SAP Solutions. “The Red Hat solution has proved to be reliable and robust,” said Zelenkov. “There has been tremendous scrutiny of this project from senior management at Metalloinvest. We would not have moved forward unless we were 100% certain the solution would provide the stability and capabilities we need.”

Maintaining critical systems with less risk

Improved reliability and performance

Metalloinvest can now better ensure high availability and efficiency for its critical production systems. With Red Hat Satellite capabilities available through Red Hat Smart Management, the company can provision, configure, patch, and control its Red Hat Enterprise Linux environment.

As a result, the company can develop faster and proactively manage its infrastructure.

Enhanced data analysis with better integration

With more effective system integration, Metalloinvest has seen improvements in the quality of business data it gathers and acts on.

“Metalloinvest is better able to forecast production, stock, sales, and logistics based on historical data,” said Zelekov. “They can also forecast three different scenarios in less time than it previously took to just produce one model. Previously it would take three months to produce one model. Now we have three models in less than a month.”

With more accurate data supporting more intelligent infrastructure, the company can predict and reduce future problems and better manage its resources.

Reduced risk with comprehensive support

Red Hat Satellite ensures that Metalloinvest’s Red Hat infrastructure stays up-to-date with the latest security patches and provides reports on the historical state of systems at any given point for auditing.

In addition, the company and JSA Group worked with Red Hat to quickly resolve any issues and act on Red Hat Insights risk predictions.

“Red Hat has excellent in-country support at all levels—technical, management, and strategic,” said Zelenkov. “While we want to be as self-sufficient as possible, the best way to optimize a solution is by working with, and learning from, the solution provider. Having Red Hat working alongside us, speaking the same language, was essential while working on such critical systems.”

Adopting emerging technology for future innovation

After seeing improvements from adopting Red Hat Enterprise Linux for SAP Solutions, Metalloinvest continues to improve support for its SAP environment. The company plans to build a second data-center for disaster support and recovery, as well as adopt new technology from Red Hat to further enhance its SAP and Linux infrastructure.

The company will implement Red Hat CloudForms to help manage its VMware platform and add private cloud capabilities for non-SAP services, with the goal of supporting more data, Internet of Things (IoT) capabilities, and development of more customized applications.

In addition, Metalloinvest is planning to evaluate using Microsoft Azure as a reserve platform for its SAP landscape and plans to adopt Red Hat Ansible Tower to help with the next stage of network automation, with help from Red Hat Consulting.

“With Red Hat, we have the tools to make our people and our operations more productive,” said Zelenkov.

Learn more about how the partnership between Red Hat and SAP helps you get the most out of SAP's powerful analytics and data management portfolio

redhat.com/sap

About Metalloinvest

Metalloinvest is a leading global producer and supplier of HBI (hot-briquetted iron) and iron ore products, and a regional producer of high quality steel. Metalloinvest comprises of leading iron ore production facilities in Russia: Lebedinsky GOK and Mikhailovsky GOK; steel mills: Oskol Elektrometallurgical Plant and Ural Steel; and a ferrous scrap enterprise, Ural Scrap Company. Metalloinvest extracts iron ore from the second largest measured iron ore reserve base in the world with approximately 14.1 billion tons of proven and probable reserves on a JORC (IMC Montan) equivalent basis and about 140 years of reserve life. The company processes a large proportion of its iron ore into high added value products, such as pellets and HBI/DR (direct reduced iron).

About Red Hat



Red Hat is the world's leading provider of enterprise open source software solutions, using a community-powered approach to deliver reliable and high-performing Linux, hybrid cloud, container, and Kubernetes technologies. Red Hat helps customers integrate new and existing IT applications, develop cloud-native applications, standardize on our industry-leading operating system, and automate, secure, and manage complex environments. Award-winning support, training, and consulting services make Red Hat a trusted adviser to the Fortune 500. As a strategic partner to cloud providers, system integrators, application vendors, customers, and open source communities, Red Hat can help organizations prepare for the digital future.



facebook.com/redhatinc
@RedHat
linkedin.com/company/red-hat

North America
1 888 REDHAT1
www.redhat.com

**Europe, Middle East,
and Africa**
00800 7334 2835
europe@redhat.com

Asia Pacific
+65 6490 4200
apac@redhat.com

Latin America
+54 11 4329 7300
info-latam@redhat.com