



STEEL PRODUCER SEVERSTAL GETS EARLY WARNING OF SAP SYSTEM FLAWS FROM POSITIVE SERVICES

THE CHALLENGE

Identify vulnerabilities in a new SAP-based ERP solution designed for 10,000 users, identify Severstal's level of risk and recommend steps to reduce exposure

With production of 11.3 million tons per year, Severstal is one of the world's leading steel and mining groups. The company's Enterprise Resource Planning (ERP) system was custom built by a systems integrator using software modules from the multinational German company SAP. Based on the SAP Netweaver platform, the solution was designed to serve over 10,000 users within Severstal and its global subsidiaries.

Before rolling out such a significant new system, Severstal's Information Security Department insisted on a thorough security audit to identify vulnerabilities in the software and its underlying infrastructure. Severstal turned to its existing partner, Positive Technologies.

"We have used the MaxPatrol™ Vulnerability and Compliance solution for several years," says Stanislav Khaylo, Severstal's SAP Security Team Leader. "So we knew that Positive Technologies had a lot of experience in vulnerability assessments and penetration testing as well as strong security research capabilities. When we contacted them about this project we were impressed by the innovative audit techniques that they proposed to use."

THE SOLUTION

Custom vulnerability assessments for SAP from Positive Services

A team of six security audit experts from Positive Services spent three weeks examining the new ERP system in detail. The majority of the analysis was performed remotely, working on Severstal's test environment. The detailed security audit covered the SAP modules themselves and the supporting infrastructure elements such as the operating system, server hardware and DBMS. A variety of tools were used during the testing, including the MaxPatrol™ vulnerability and compliance management solution, which is certified for integration with SAP NetWeaver® 7.0.

The team's report contained a list of all the vulnerabilities found, with each classified according to the level of risk it posed to Severstal's operations. A number of attack scenarios were included to illustrate how hackers might exploit these vulnerabilities to interrupt Severstal's operations or obtain confidential information.

"We were really impressed at the quality of the report we received from Positive Services," says Mr Khaylo. "Especially when you consider the strict SAP privileges and network restrictions they had to negotiate. The report was very thorough and was visualized throughout with diagrams and charts that made it easy to understand. The attack scenarios were helpful in communicating the potential impact of an attack based on the key threats. The report also contained clear and detailed recommendations on how we could mitigate our risk levels."

COMPANY PROFILE

- + Industry:**
Steel Production and Mining
- + Revenue:**
US\$8.3bn (2014)
- + Employees:**
52,000
- + Locations:**
Operations in Russia, CIS, Eastern Europe, Italy and West Africa



HIGHLIGHTS

- + Uncovered high risk vulnerabilities in a new SAP-based ERP solution before it deployed to production
- + Revealed the potential impact of a vulnerability-based breach in detailed attack scenarios
- + Recommended comprehensive steps to mitigate each vulnerability
- + Empowered Severstal to obtain best value from its systems integrator

THE BENEFITS

Reduced risk and obtained increased value for money from development partner

The vast majority (over 99%) of the vulnerabilities found during the analysis were related to misconfigurations rather than to flaws in the SAP software modules themselves. Armed with the report from Positive Services, Severstal was able to return to its systems integrator and request action to address each issue before the system could be accepted and deployed into production.

“We needed to be fully confident in the security levels of our new SAP system as it has such a crucial role in our business,” says Mr Khaylo. “The detailed security audit from Positive Services gave us visibility of vulnerabilities across the infrastructure. We have been able to address the issues they raised with our development partner and ensure they implemented the recommendations from Positive Services.”

About Positive Technologies

Positive Technologies is a leading provider of vulnerability assessment, compliance management, and threat analysis solutions to more than 3,000 global enterprise clients. Our solutions work seamlessly across your entire business: securing applications in development; assessing your network and application vulnerabilities; assuring compliance with regulatory requirements; and blocking real-time attacks. Our commitment to clients and research has earned Positive Technologies a reputation as one of the foremost authorities on SCADA, banking, telecom, web application, and ERP security, and distinction as the #1 fastest growing Security and Vulnerability Management firm in 2012, as shown in an IDC report*. To learn more about Positive Technologies please visit ptsecurity.com.

*Source: IDC Worldwide Security and Vulnerability Management 2013-2017 Forecast and 2012 Vendor Shares, doc #242465, August 2013. Based on year-over-year revenue growth in 2012 for vendors with revenues of \$20M+.

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