Prague Public Transit Company (Dopravní podnik hlavního města Prahy, a.s.)

To keep commuters, day-trippers, and tourists moving around town, the Prague Public Transit Company (DPP) relies on its mission-critical SAP workloads running seamlessly. As part of a wider modernization of its SAP landscape, DPP migrated its database platform to SAP HANA running on SUSE Linux Enterprise Server for SAP Applications. As well enjoying improved availability, performance, and stability for key workloads, DPP has laid the ideal foundation for its move to SAP S/4HANA with SUSE Linux.

Overview
The Prague Public Transit Company (Dopravní podnik hlavního města Prahy, a.s., or DPP) operates metro, tram, bus, and cable car services in the Czech capital. DPP manages more than one billion trips across its network each year and employs some 11,000 people.

Challenge
Prague is a busy, bustling city, home to 1.3 million people. Its citizens—and the millions of tourists who visit each year—depend on public transport services running reliably to get around for work and leisure.

DPP uses SAP ERP software to keep Prague moving. The company’s extensive SAP landscape covers everything from transportation planning and logistics to back-office functions such as supplier relationship management, finance, and business intelligence.

Previously, DPP ran its SAP ERP systems on the IBM AIX operating system on IBM Power Systems servers. To keep its mission-critical SAP landscape on the vendor’s support path, and to take advantage of new capabilities such as real-time data analytics, DPP planned to upgrade to SAP S/4HANA.

Successfully Migrating SAP Database to SUSE Linux

“We were pleasantly surprised by how easy it was to move our SAP database servers from AIX to SUSE Linux Enterprise Server. The level of detail in the SUSE solution documentation was excellent, making for a quick implementation and smooth transition.”

JIRI KRIZEK
Unix/Linux System and Backup Administrator
Prague Public Transit Company

Results
+ Boosts availability and performance of mission-critical SAP workloads
+ Ensures 24/7 uptime for core ticketing application
+ Lays the groundwork for future move to SAP S/4HANA
“We have some experience using SUSE Linux Enterprise Server for non-SAP workloads, and have always found it to be a very stable and reliable platform. What’s more, SUSE is SAP’s preferred Linux distribution and the recommended operating system for SAP HANA.”

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Unix/Linux System and Backup Administrator
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Solution
As the first step on its journey to SAP S/4HANA, DPP needed to migrate its SAP database servers to the SAP HANA platform. This required a move away from AIX to a Linux operating system. For DPP, SUSE Linux Enterprise Server for SAP Applications was the obvious choice.

Jiri Krizek, Unix/Linux System and Backup Administrator at DPP, comments: “We have some experience using SUSE Linux Enterprise Server for non-SAP workloads, and have always found it to be a very stable and reliable platform. What’s more, SUSE is SAP’s preferred Linux distribution and the recommended operating system for SAP HANA.”

DPP currently runs its SAP HANA databases on SUSE Linux Enterprise Server for SAP Applications 11 SP4 on IBM POWER8 processor-based servers. The company is currently in the process of migrating to IBM POWER9 processor-based servers with SUSE Linux Enterprise Server for SAP Applications 15 SP1 in preparation for the future move to SAP S/4HANA.

Jiri Krizek says: “The features and functions support in SUSE Linux Enterprise Server for SAP Applications 15 are a clear improvement on the previous version we used, specifically for IBM POWER9. For example, OS support for vNIC adapters enables Live Partition Mobility. We are delighted that SUSE continues to improve its solutions for IBM hardware.”

Today, DPP uses the IBM PowerVM virtualization solution to run 50 logical partitions (LPARs) across four IBM Power Systems servers. 20 LPARs support the new SAP HANA databases, running on the SUSE Linux Enterprise platform. The remaining LPARs support the SAP applications themselves, running on the IBM AIX operating system.

Specifically optimized to support SAP software, SUSE Linux Enterprise Server for SAP Applications includes the SUSE Linux Enterprise High Availability Extension as standard, as well as integrated priority support.

“We have been very impressed with the stability of the SUSE solution so far—it just runs,” says Jiri Krizek.

Results
With its new SAP HANA landscape running on SUSE Linux Enterprise Server for SAP Applications, DPP benefits from high availability, optimal performance, and easy management for several key workloads.

For instance, the company recently developed a brand-new ticketing application on SAP HANA. By taking advantage of the built-in clustering technology, part of the SUSE Linux Enterprise High Availability Extension, DPP can ensure round-the-clock availability for the ticketing application, enabling customers to buy metro, tram, and bus tickets 24/7.

Jiri Krizek adds: “SUSE Linux Enterprise Server for SAP Applications is very well-suited for the IBM Power platform, allowing us to fully exploit the capabilities of the IBM hardware and further ramp up performance for SAP HANA workloads.”

Crucially, DPP has laid a solid foundation for its upcoming migration to SAP S/4HANA. Once it has implemented the latest-generation ERP software, the company will run its entire SAP HANA database landscape on SUSE Linux Enterprise Server for SAP Applications, enabling it to reap the rewards of high availability, performance, and stability for all SAP workloads.

DPP also plans to implement SUSE Manager to automate configuration tasks and patching to keep systems up to date with minimal effort. To further improve availability of the SAP HANA database, DPP plans to try SUSE Enterprise Live Patching. This will enable the company to patch servers without any need to reboot them, minimizing downtime.

Jiri Krizek concludes: “We rely on SAP software to keep operations on track and Prague’s public transport network running smoothly. Supported by SUSE, we’re modernizing our SAP landscape to deliver stellar services for passengers—now and in the future.”