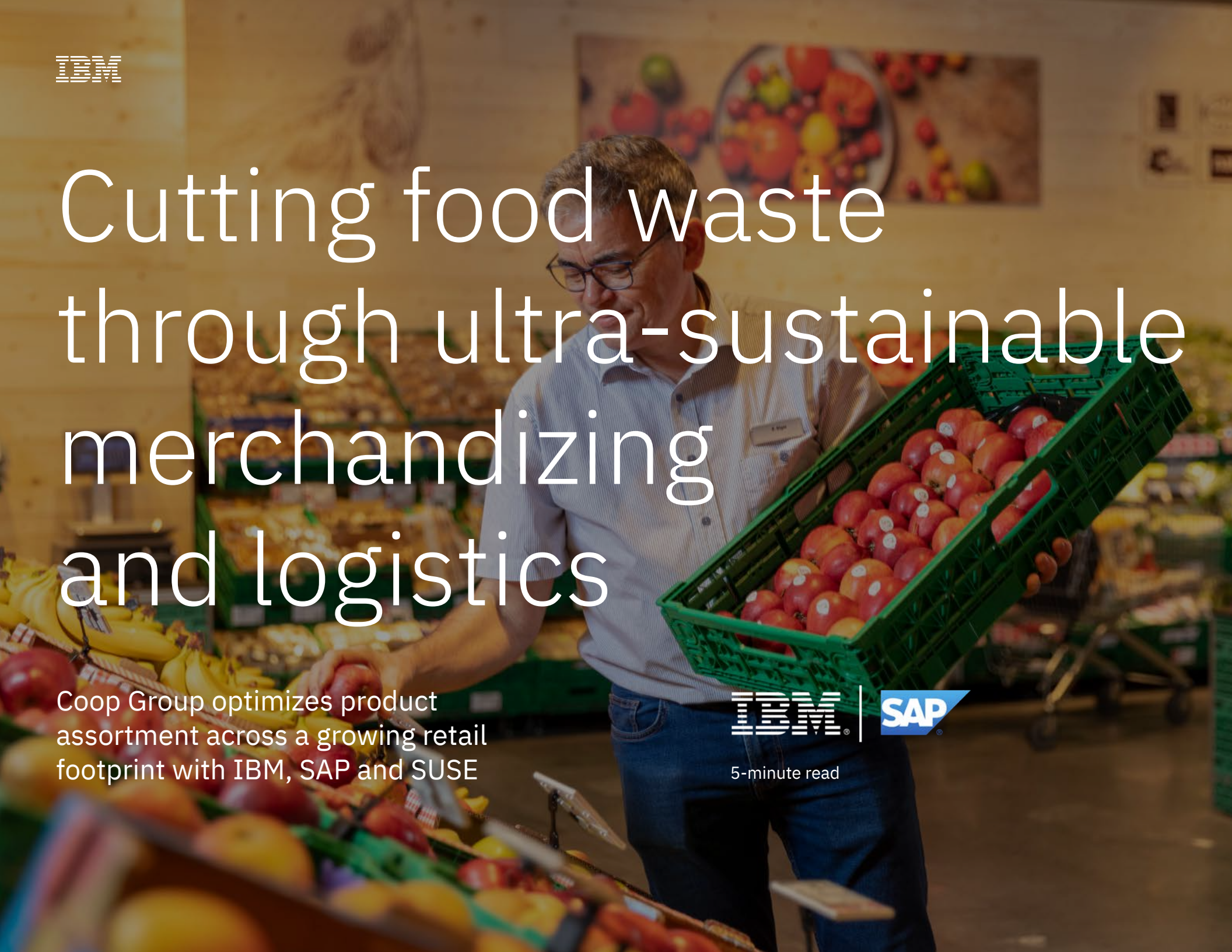
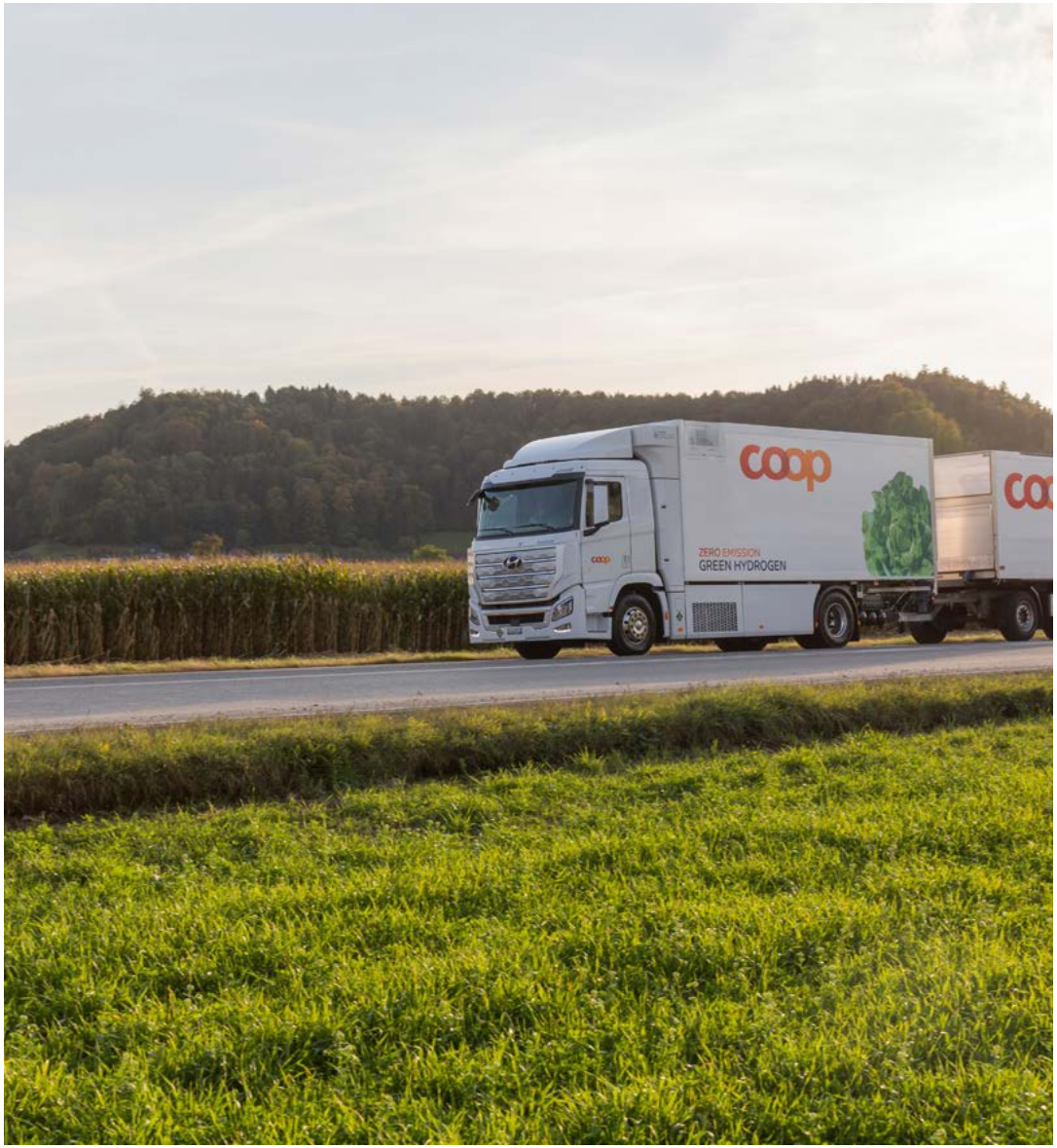


Cutting food waste through ultra-sustainable merchandizing and logistics

Coop Group optimizes product assortment across a growing retail footprint with IBM, SAP and SUSE

5-minute read

Cutting food waste is a key ingredient in Coop Group's recipe for a more sustainable future, and to help realize this vision the organization is focusing on optimal product assortment and quantities across all stores. Coop Group is using high-performance IBM® Power10 servers with SUSE Linux® Enterprise Server for SAP Applications to accelerate SAP S/4HANA® reports by up to 30%—empowering the company to run the business more efficiently with fast, data-driven decisions.



Coop Group strives to be more than a leading food producer and retailer in Switzerland. The company has set ambitious targets to reduce its environmental impact and become

carbon neutral by 2050. The sustainability strategy includes investment in organic agriculture and regional produce, as well as wider use of fairtrade products—contributing to a better Switzerland and a better world.

In Europe, an estimated 20% of the total food produced is lost or wasted (external link), and unsold food in retailers makes up portion of this total. To help minimize waste caused by expired produce, Coop Group calculates the optimal product assortment and quantities for each of its stores across the country.

This task becomes more complex as Coop Group continues to open new branches while also updating and optimizing its inventory. Christoph Kalt, IT Architect at Coop Group, adds: “As we grow, it’s important that our merchandizing and logistics processes are running reliably and fast. The higher

IBM Power delivers

100%

availability for 11 years

Accelerates SAP S/4HANA FI/CO reporting

30%

with IBM Power10 servers

compute and memory demands meant that our IT resource requirements were increasing by 20% a year for some key SAP applications."

As SAP workloads and data grew, data protection was also becoming increasingly challenging. Some data backups were overrunning maintenance windows, increasing the risk of data loss in a disaster recovery scenario.

"We depend on our SAP solutions to support the business 24 hours a day, seven days a week," Kalt confirms. "To deliver the IT headroom to support ongoing sustainable growth and ensure round-the-clock protection for our mission-critical SAP systems, we decided to expand our infrastructure with faster systems."

> "IBM Power10 is a step forward in helping us to make our data center more sustainable, and we really value the IBM support services. For us, IBM Power is the perfect combination of stability, performance, energy efficiency, flexibility and support."
>
> **Christoph Kalt**, IT Architect, Coop Group

Boosting performance with IBM Power10

For many years, Coop Group has relied on IBM Power® servers to run its mission-critical SAP solutions. To successfully support the group's ongoing expansion, Coop Group teamed up with IBM again to explore the latest generation of IBM Power servers.

Kalt remarks: "After evaluating different configurations together with IBM, we decided to deploy two IBM Power E1080 servers with IBM Power10 processors across our two data centers. We use the platforms to run our largest and most demanding SAP S/4HANA business applications and large SAP HANA in-memory databases, which

are up to 16 TB in size with annual data growth of 20%."

In parallel, Coop Group implemented another four IBM Power E1080 servers to help modernize its IT infrastructure and create capacity for additional workloads as its retail footprint grows.

Michel Rodel, Head of System Technology Unix Solutions at the Cloud Competence Center at Coop Group, adds: "We decided to expand our existing IBM Power platform for SAP HANA to make the most of our resources. With IBM PowerVM® virtualization, we can use the new IBM Power E1080 servers very flexibly alongside our existing IBM Power servers, and boost the performance of our most critical applications to ensure optimal inventory management and efficient logistics."

Rodel continues: "Overall, we run more than 40 production systems backed by the SAP HANA database on IBM Power." This includes SAP S/4HANA, SAP Customer Activity Repository for S/4HANA Retail, SAP BW/4HANA, and SAP Business Warehouse. Additionally, Coop Group also operates the SAP for Retail solution with SAP ERP, and SAP Customer Relationship Management.

Coop Group runs its SAP solutions on SUSE Linux Enterprise Server for SAP Applications (external link), and relies on SUSE Manager (external link) and Salt for configuration management.

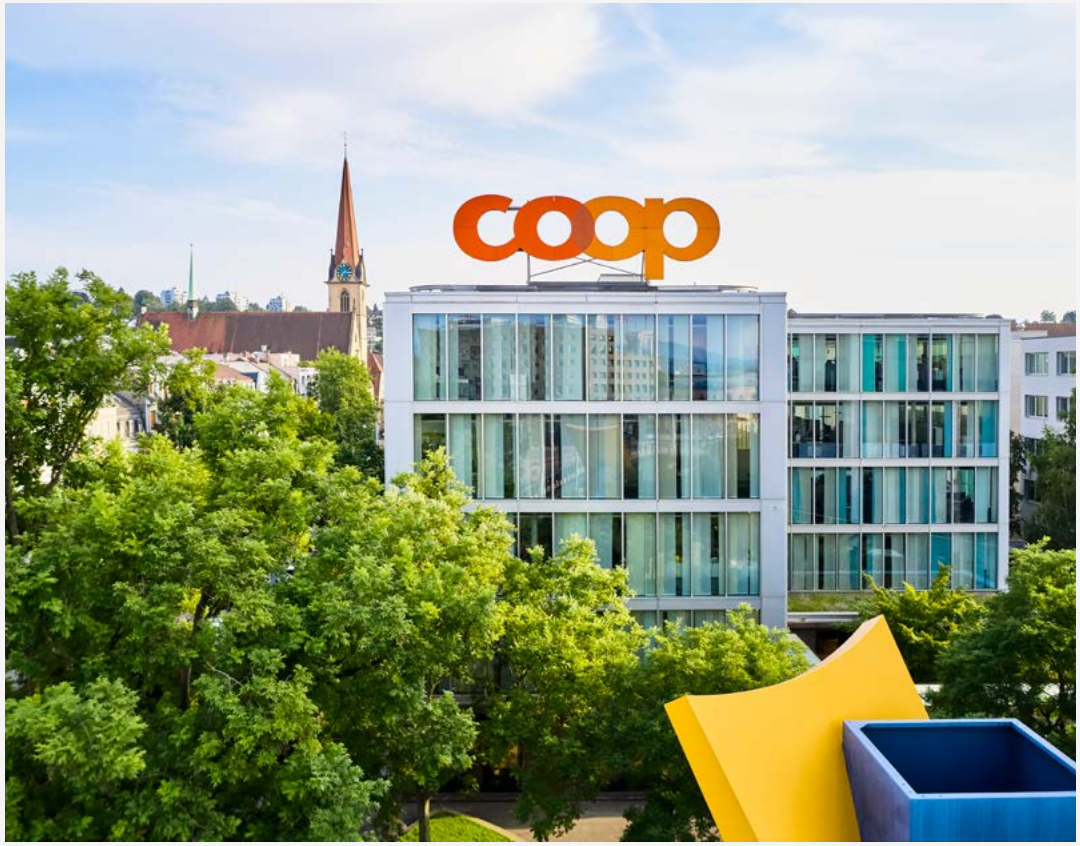
In parallel, the organization is standardizing its IT operations with highly automated DevOps processes.

"We also operate a growing hybrid cloud environment where we use public cloud instances and services in combination with our mission-critical on-premises IBM Power infrastructure" Rodel says. The company uses IBM Spectrum® Protect Plus and IBM Spectrum Protect to orchestrate data protection for its on-premises environments. "To further modernize our infrastructure management and monitoring capabilities, we are planning to deploy a number of scale-out IBM Power S1022 servers with IBM Power10 processors in the future," Rodel adds.

Fast performance, robust stability, sustainable operations

With its extensive use of IBM Power servers, Coop Group has first-hand experience of the stability of the platform. “People often ask us why we use IBM Power servers,” explains Kalt. “The answer is simple: a track record of more than 11 years without a single server failure for our mission-critical SAP business applications. This reliability allows us to focus on our sustainability vision.”

IBM’s support services and the IBM Power architecture’s steady improvements in energy efficiency over the years also contribute to Coop Group’s high level of satisfaction with the solution. Kalt says: “IBM Power10



is a step forward in helping us to make our data center more sustainable, and we really value the IBM support services. For us, IBM Power is the perfect combination of stability, performance, energy efficiency, flexibility and support."

"SAP S/4HANA running on IBM Power10 with SUSE Linux Enterprise Server for SAP Applications has accelerated some tasks by 30%—a testament to the improved performance of IBM Power10," confirms Rodel. "Our SAP S/4HANA applications are not only 30% faster on average, but end-user application performance is also more consistent—improving user satisfaction."

With IBM PowerVM® and Live Partition Mobility, Coop Group has all the flexibility it needs to keep its business applications online, even during planned system maintenance. Rodel comments: "Thanks to our reliable and scalable IBM Power platform, we have a scale-up architecture that offers an excellent experience for business users—without the complexity of software clusters."

Today, Coop Group runs SAP HANA databases of up to 16 TB on IBM Power with consistent growth of 20% per year. One of its largest databases at 12 TB is the company's SAP Customer Activity Repository for SAP S/4HANA Retail, which enables the organization to optimize its merchandizing processes and offer innovative services that rely on up-to-the-minute inventory data—such as click-and-collect services, which bring the convenience of online shopping to the in-store experience.

"At our scale efficiency is crucial," adds Kalt. "IBM Power10 excels in that respect. We have 50% better energy efficiency in watt per TB of memory for IBM Power10 compared to IBM Power8. These improvements in power consumption also contribute to our wider sustainability strategy."

Coop Group worked with IBM Technology Services to renew its data backup architecture. The company deployed IBM Spectrum® Protect on IBM AIX® and IBM Power. Today, Coop Group initially writes all its mission-critical data to disk to accelerate backups by 50% and minimize slowdowns for business users. In a second step, data is stored on write-once, read-many (WORM) storage to enable rapid recovery if required. For long-term retention, the company uses two IBM TS4500 Tape Library solutions to create tape backups, with one copy stored offsite for an additional layer of data protection.

"IBM Technology Services did a good job," notes Rodel. "By leveraging network virtualization features, IBM

Technology Services helped us increase the volume of network traffic we can process substantially to ensure smooth business operations."

Coop Group is also standardizing its configuration management and software distribution processes. "With SUSE Manager and Salt we reduce the time spent on keeping our systems updated and secure by around 20%," confirms Rodel. "By moving from custom scripts to an enterprise-class tool, we reduce configuration drift and increase standardization."

Kalt concludes: "Thanks to the good performance, proven reliability and built-in encryption of IBM Power10, we can continue to transform, modernize and protect our business with innovative SAP S/4HANA."

"SAP S/4HANA running on IBM Power10 with SUSE Linux Enterprise Server for SAP Applications has accelerated some tasks by 30%—a testament to the improved performance of IBM Power10."

Michel Rodel, Head of System Technology Unix Solutions, Cloud Competence Center, Coop Group

About Coop Group

Coop Group (external link) is a leading producer, retailer and wholesaler in Switzerland and Europe with more than 2,300 shops and outlets. Headquartered in Basel, Coop Group employs more than 95,000 people and generates annual revenues of CHF 31.9 billion (USD 32.5 billion). The group focuses on local and regional production as well as advanced logistics to support its sustainability strategy and reduce food waste.

Solution components

- IBM® AIX®
- IBM Power® E1080
- IBM Power E980
- IBM Power S1022
- IBM PowerVM®
- IBM Spectrum® Protect
- IBM Spectrum Protect Plus
- IBM Technology Services
- IBM TS4500 Tape Library
- SAP Business Warehouse on SAP HANA
- SAP BW/4HANA
- SAP Customer Activity Repository for S/4HANA Retail
- SAP Customer Relationship Management
- SAP ERP
- SAP for Retail
- SAP HANA
- SAP S/4HANA®
- SUSE Linux® Enterprise Server for SAP Applications (external link)
- SUSE Manager (external link)