

The Schwarz Group enhances Linux server management with Red Hat Ansible Automation Platform











Software

Red Hat® Ansible® Automation Platform (formerly Red Hat Ansible Tower) The Schwarz Group is the fourth-largest retailer in the world based on revenue, operating more than 12,500 stores under the Lidl and Kaufland brands. To manage these stores consistently while flexibly adapting to local demand, the group migrated from its existing Puppet management to Red Hat Ansible Automation Platform. With a consistent operational foundation, the group can use self-service capabilities to quickly deploy innovative digital services and stay competitive.



"Staying competitive means we need to offer new, digital features and stable, timely services to all of our stores. The only way to achieve this goal is with a centralized automation platform like Red Hat Ansible Automation Platform."

Felix Kuehner

Compute & Runtime Services – Linux, Schwarz IT

Retail

458,000 employees More than **12,500** stores

Benefits

- Improved delivery time for new, innovative applications and digital services
- Gained expertise to operate Ansible in-house, backed by enterprise support
- Enhanced risk management with role-based system access



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

redhat.com



Ensuring consistency across thousands of retail stores worldwide

German retail group, The Schwarz Group, operates more than 12,500 stores in 33 countries under the Lidl and Kaufland brands and provides production and waste management services. The fourth largest retailer in the world based on revenue, Schwarz is rapidly growing its international presence. To succeed, the group must balance consistent store management with the flexibility to adapt to local demands and the agility to open new stores quickly, particularly in new markets.

Its internal IT service provider, Schwarz IT, employs more than 3,500 engineers to support more than 1,000 SAP systems and 28PB of datacenter-hosted storage. Each Schwarz store operates a Storeserver, a central operational system installed by the company's local IT team that controls a range of store functions, from checkout kiosk systems and closed-captioning security (CCTV) to recycling and reward programs.

Initially, the retailer used Puppet automation technology to manage this centralized system. But to improve user management and authorization, Schwarz IT sought to introduce controlled, efficient self-service capabilities to speed deployment processes.

"The Storeserver environment has always been standardized, but we wanted an automation framework and self-service features to help us roll out new services and stores globally while still supporting local, decentralized management," said Felix Kuehner, Compute & Runtime Services – Linux, Schwarz IT.

"Automation is a critical component of our business operations, and a key reason we decided to use Red Hat's enterprise solution was the more efficient update process."

Felix KuehnerCompute & Runtime Services — Linux,

Schwarz IT

Deploying a supported enterprise automation platform

Schwarz IT sought to adopt an open source automation solution to replace Puppet for use by its inhouse teams. The company decided to switch to a supported, enterprise solution: Red Hat Ansible Tower (now part of Red Hat Ansible Automation Platform).

"Our priority is always to look to solve challenges ourselves and find the best solutions for our environment. Due to complex and time-intensive processes, the community version did not work to our satisfaction. Automation is a critical component of our business operations, and enterprise support was a key reason we decided to use Red Hat's solution," said Kuehner.

Red Hat Ansible Automation Platform is a simple, agentless automation platform that lets Schwarz centralize and control its IT infrastructure at scale using reusable, playbook-based self-service capabilities.

During a two-day workshop, Schwarz IT's teams worked with Red Hat's technical experts to review the architecture and establish best practices for the new automation solution.

The group now runs more than 5,000 Ansible Automation Platform jobs each day to manage its Storeservers. Full migration of its Storeserver environment from Puppet is expected to be completed in 2021.

Supporting retail business success with consistent yet adaptable operations

Improved delivery time for new applications

The Schwarz Group rapidly opens stores when entering new markets—up to 200 stores in one year in some regions. Automating workflows and management with Ansible Automation Platform helps Schwarz IT create and launch innovative digital services to stores—from dynamic digital signs to intelligent checkout queue management—while maintaining central control and visibility into operations worldwide.



"As online shopping has become more prevalent, digitalization in retail is key," said Kuehner. "Staying competitive means we need to offer new, digital features and stable, timely services to all of our stores. The only way to achieve this goal is with a centralized automation platform like Red Hat Ansible Automation Platform. We can create playbooks to automatically launch any new applications to all of our stores in just one step, as well as playbooks to give local teams a framework for adapting to local demand while we maintain consistent brand presence across as Schwarz stores."

Schwarz IT can now deploy applications to decentralized environments like Storeservers faster than before. After deployment, country administrators can automate and deploy services without needing to manage or access the Storeserver for their location.

Country administrators can automate and deploy services without root access to the store server. Clearly defined playbooks establish parameters, local teams spend less time duplicating efforts, leaving them more time to focus on local projects.

"We can plan Ansible jobs to complete around the clock, regardless of local timezones," said Kuehner.

Enhanced in-house automation expertise to save management and development time

Working closely with Red Hat has helped Schwarz IT's teams verify the new automation architecture and enhance their expertise to operate Ansible Automation Platform in-house. For example Schwarz IT's teams have successfully used their new knowledge to replace custom, team-specific installation and update scripts with a centralized, automated approach for tasks like operating system updates.

"Red Hat experts worked with us in the office during a two-day workshop before deployment to verify the planned architecture and processes. It would have been highly complicated and time-consuming to solve some of the architectural issues we uncovered with the unsupported community version of Ansible," said Kuehner. "We have a clear escalation path with Red Hat Support, and we meet and communicate with each other on a regular basis."

Improved risk management with role-based system access

With Red Hat Ansible Automation Platform, Schwarz IT can more effectively balance controlling system access by authorized application and development with desired self-service capabilities. Role-based access control means application teams can run automatic deployments as regular users — without requiring root access to critical core business systems.

"This feature provides high-level consistency while letting individuals be proactive in working on new and existing projects," said Kuehner.

Finding new opportunities for efficient application development

After its initial success with Red Hat Ansible Automation Platform, Schwarz IT plans to continue exploring ways to help The Schwarz Group achieve consistent yet responsive store operations.

"We've valued working with Red Hat and hope to continue using Ansible to find new ways to make our business more modern and efficient," said Kuehner.



About The Schwarz Group

The Schwarz Group is a German, privately owned retail group that operates more than 12,500 stores globally. It has two retail brands, Lidl and Kaufland, as well as production and waste management services brand Pre Zero. Lidl is a global discount supermarket chain consisting of 11,000 stores, while Kaufland is a hypermarket chain with 1,100 stores, focused on providing a large number of variety items at discount. The Schwarz Group is the fourth largest retailer in the world based on revenue. https://it.schwarz/

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 1888 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