Cepsa automates IT to improve its operational efficiency with Red Hat

Global energy and chemical company Cepsa needed to increase efficiency and stay compliant while reducing costs, risk, and downtime. To achieve this goal, it began automating processes to save work hours, improve service response times, enhance IT security, and transform organizational culture. Working in close collaboration with Red Hat Consulting, the company established automation as a core pillar of its innovation strategy, led by an automation manager. As a result, Cepsa increased productivity by 35% and increased response times by 10–15%.

"Red Hat has helped us make automation the center of our digital transformation efforts."

Francisco José Martín Pérez
Automation Manager, Department of Exploitation and Operation, Cepsa

Benefits
- Saved more than 6,000 work hours with central automation approach
- Enhanced service levels with 10–15% faster IT response times
- Improved IT security with enhanced access controls
- Transformed business culture with expert automation guidance
Taking the first steps on an automation journey

Cepsa is a leading international company, with operations on five continents, committed to sustainable mobility and energy with strong technical expertise after more than 90 years of activity. It also has a global chemicals business with world-leading positions and a progressive green plan.

To increase operational efficiency and establish consistent IT security, Cepsa began a digital transformation initiative in 2018. The company adopted the community version of Ansible because automation was key to helping managers dedicate more time to higher-level tasks. The automation tool demonstrated efficiency that Cepsa wanted to expand organization-wide.

"In the beginning, we were using the Ansible community version to automate small services," said Francisco José Martín Pérez, Automation Manager, Department of Exploitation and Operation, Cepsa. "Then we had a complex SAP migration, from our on-premise SAP platform to SAP S/4HANA® in the AWS cloud. We saw automation could help, but we needed an automation platform to achieve our goals."

A comprehensive automation platform would help Cepsa benefit from enterprise services and maximize resources for support, expertise, and more. These factors would prove vital for effectively transitioning crucial systems to the cloud.

Building a foundation for a new automation approach with Red Hat

Cepsa already had proven success with trusted vendor, Red Hat. A combination of Red Hat OpenShift—deployed on-premise—and Red Hat OpenShift Data Foundation (formerly Red Hat OpenShift Container Storage) reduced time to market for new applications and helped the business scale its hybrid cloud strategy.

With the success of its early automation projects and its long-standing relationship with Red Hat, the company decided to extend Ansible across the business with Red Hat Ansible Automation Platform. Ansible Automation Platform provides enterprises with a supported foundation for building and operating automation services at scale, and a composable, collaborative, and trusted execution environment.

Cepsa adopted Red Hat Ansible Automation Platform for its SAP migration. Ansible Automation Platform offers a visual dashboard and access control for automation functions and tools. These tools include analysis systems and reusable and certified content, so users can centralize and control their infrastructure.

Cepsa turned to Red Hat Consulting for guidance on how to maximize value from its automation platform. Through the Red Hat Navigate engagement, Cepsa and Red Hat Consulting worked together to identify knowledge gaps and the cultural changes required for successful implementation of automation initiatives. Red Hat is helping Cepsa establish an organizational model for automation by delivering online workshops designed to help teams understand automation and its possibilities.

Working with Red Hat’s experts, Cepsa completed its SAP S/4HANA migration in just a few months. Within a year, the company has automated more than 400 IT operations processes.
Improving customer and staff experience with a culture of automation

Saved more than 6,000 work hours with central automation approach

With Ansible Automation Platform, diverse teams at Cepsa have a centralized environment for automation. The company can share guides and workflows among these teams while maintaining separate applications or infrastructure when needed. “Red Hat helps us to manage group applications, and this management allows us to provide users with the autonomy they need,” said Martín Pérez.

By optimizing its automation approach, Cepsa has increased productivity by 35% compared with the previous year. The company now freed more than 6,000 work hours, previously dedicated to repetitive IT administration tasks, for more strategic work.

“A more productive business is a more competitive business,” said Martín Pérez. “We have been able to dedicate the equivalent of 18 months of one employee’s work to more rewarding, strategic projects within the IT department.”

Enhanced service levels with 10–15% faster IT response times

Automation has also benefited Cepsa’s end customers. Response times for IT incidents have improved by 10–15%, and Cepsa predicts they will eventually improve by 20–25%.

“For example, when a user needs a password reset, our response is practically immediate,” said Martín Pérez. “They can now reset their password within five minutes when they previously would need to wait more than 30 minutes.”

Improved IT security with enhanced access controls

Standardizing processes has also helped Cepsa reduce the number of additional security administration permissions in its systems, mitigating risk. It now groups users by job role and department to ensure the correct permission levels are granted without overextending access.

“We created a catalogue of actions that these groups can perform, like restarting servers, so a technician doesn’t need to log in to restart a service. Instead, this process is automated,” said Martín Pérez. “The technician can access Ansible Automation Platform and can restart the service without credentials. And we know that it will always do it the same way because it is predetermined in the code.”

Transformed business culture with expert automation guidance

Red Hat Consulting helped Cepsa implement the changes needed to maximize the value of their new automation technology and approach. Working alongside the Cepsa team, Red Hat experts helped show the value of an agile work approach and continuous quality improvements through a continuous integration and continuous delivery (CI/CD) approach.

“Automation helped support a positive cultural shift, resulting in better collaboration between teams,” said Martín Pérez. “Red Hat is collaborating with us to implement best practices and learn from their expertise across our entire organization.”

Building on success through continued collaboration with Red Hat

Cepsa plans to take advantage of more automation opportunities, such as extending Ansible Automation Platform to its ServiceNow ticketing system integration.
"Integrating Ansible Automation Platform with ServiceNow is vital for us to better manage requests and workflows," said Martín Pérez. "Ansible Automation Platform is certified for ServiceNow, so we anticipate this integration will be more efficient and more effective."

Cepsa is also creating a hybrid application platform based on Kubernetes container technology to run applications both on-premise and in the cloud. "This new platform will help enhance our development flexibility with greater transparency and centralized operations," said Martín Pérez.

The company plans to continue working closely with Red Hat teams and technology to continue its automation journey.

"Red Hat has helped us make automation the center of our digital transformation efforts," said Martín Pérez. "We want to continue automating more tasks, and we know we can rely on Red Hat as a trusted vendor to help us achieve greater efficiency."

About Cepsa

Cepsa is a leading international company committed to sustainable mobility and energy with strong technical expertise after more than 90 years of activity. It also has a global chemicals business with world-leading positions and a progressive green plan. The company presented in 2022 its new strategy for 2030, Positive Motion, projecting its ambition to be a leader in sustainable mobility, biofuels, and green hydrogen in Spain and Portugal and a key benchmark in the energy transition. Cepsa puts customers at the heart of its activity and will work with them to help design and achieve their decarbonization efforts. Environmental, social, and corporate governance (ESG) criteria inspire everything the company does as part of its goal to become net positive. Cepsa intends to cut scope 1 and 2 CO2 emissions by 55% this decade and scope 3 emissions by 15-20%, aiming to reach net zero across all three scopes by 2050.