Chevron Phillips Chemical reduces SAP production defects by 65% through automation

Global petrochemical leader turns a major S/4HANA migration and ongoing SAP testing into a model of speed and precision

80%
automation coverage

65%
fewer production defects

<48
hours full-suite runtime

Summary

At Chevron Phillips Chemical (CPChem), SAP supports the daily operations of the global enterprise that runs around the clock. From managing raw material purchasing and production scheduling to invoicing, logistics, and financial reporting, nearly every business process depends on SAP working correctly. A single defect can slow down plants, disrupt supply chains, and affect compliance.

When CPChem began preparing for a major migration from SAP ERP Central Component (ECC) to S/4HANA, the pressure to strengthen SAP testing intensified. The company was already running annual SAP upgrades and continuous improvement projects, each requiring extensive validation. But testing was still largely manual, managed through a legacy Lotus Notes database and spreadsheets tracking thousands of business scenarios.

To protect system stability, CPChem adopted Worksoft Certify to automate end-to-end SAP testing and build a reusable regression suite that runs regularly. What began as an effort to replace manual tools evolved into a long-term strategy to improve reliability, reduce risk, and accelerate delivery. With roughly 80 percent of SAP testing now automated, CPChem has reduced the number of defects reaching production by up to 65 percent and can complete a full regression in under 48 hours.

"We look at Worksoft as a tool that mitigates risk. We're better equipped now to support the business at a faster pace."

— **Pratap Manubolu,** *Senior SAP Basis and Integration Consultant, CPChem*

The company

Formed in 2000 as a joint venture between Chevron and Phillips 66, <u>Chevron Phillips Chemical</u> is one of the world's leading petrochemical companies. With 5,000 employees and 30 global facilities, CPChem produces the chemicals used in more than 70,000 consumer and industrial products. From packaging and medical supplies to automotive parts and construction materials, it supplies customers in over 140 countries with the chemicals needed to make the products people rely on every day.

The challenge

CPChem had a detailed, highly structured SAP testing process that reflected how critical the system was to its business. Every update went through careful validation so core processes would continue to run smoothly across procurement, production, logistics, and finance. The approach was meticulous but also resource-intensive. Roughly 3,000 SAP business process scenarios were managed in a homegrown Lotus Notes database and tracked in spreadsheets, requiring close coordination across multiple departments.

"Everything was done manually," recalls Pratap Manubolu, Senior SAP Basis and Integration Consultant at CPChem. "We documented each step in detail, captured screenshots for every result, and made sure nothing was missed, but it took a lot of coordination and time between teams."

That rigor ensured quality but placed heavy demands on both IT and business users. IT managed the test cycles and reporting, while business users had to step away from daily responsibilities to run repeated rounds of regression testing. When the company began preparing for its ECC-to-S/4HANA migration, that workload multiplied. Thousands of processes needed to be revalidated in the new environment while ongoing upgrades and improvement projects continued in parallel.

With testing demands growing, CPChem needed a way to keep SAP testing consistent and reliable without overburdening IT or business users.

The solution

CPChem turned to Worksoft Certify to strengthen its SAP testing program and lay the groundwork for a smooth S/4HANA migration. The team needed a platform that could automate complex SAP workflows, maintain audit-ready documentation, and scale across a global enterprise. Worksoft's deep SAP integration and codeless automation made it an ideal fit.

To improve traceability, CPChem combined Worksoft with Jira for unified test coverage tracking, allowing teams to manage both automated and manual tests from a single view. The company also worked with one of Worksoft's system integrator partners, LTI Mindtree, to tailor the automation framework to CPChem's enterprise environment and support large-scale adoption across teams.

CPChem's S/4HANA migration was guided by a "no harm" principle, focused on making the transition as seamless as possible so end users keep working in the same SAP GUI without disruption. To achieve that, the company followed a Bluefield migration approach, selectively moving validated data and configurations instead of lifting the entire system. This offered greater control but required precise, ongoing validation with Worksoft to keep both environments aligned.

Worksoft enabled CPChem to run full regression cycles quickly and consistently throughout the migration, automatically capturing documentation and screenshots that once took hours. CPChem was able to validate both process logic and data integrity during the complex migration with minimal disruption to the business.

"During the S/4HANA migration, Worksoft allowed us to run automated tests as soon as changes were made," explains Manubolu. "It gave us confidence that everything was working correctly before we moved anything to production."

Impact

By automating nearly 80 percent of SAP test scenarios with Worksoft, CPChem has transformed its validation process into a continuous, scalable framework without sacrificing quality or control.

Full regression cycles that once required weeks of coordination now run end-to-end in less than 48 hours with complete traceability. Early issue detection and consistent regression coverage have helped cut the number of defects reaching production by as much as 65 percent.

The platform has also strengthened audit readiness, making SAP rollouts smoother and more predictable. Automated documentation and reusable test assets have eliminated hours of manual reporting and rework, allowing teams to focus on innovation rather than repetitive validation.

The efficiency and consistency gained through Worksoft have given CPChem the agility to support business change with confidence. "We look at Worksoft as a tool that mitigates risk," adds Manubolu. "We're better equipped now to support the business at a faster pace."