

# Northrop Grumman keeps SAP systems mission-ready with faster testing

Automating S/4HANA validation helps maintain reliability across finance, supply chain, and manufacturing

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**85%+**

faster expense processing

## Summary

When your technology supports national defense and space exploration, there's no room for failure. With SAP at the center of Northrop Grumman's global operations, system stability is what keeps the company's core business processes running safely, on schedule, and in full compliance. But with tens of thousands of SAP users and constant software changes, manual testing made it difficult for Northrop Grumman's small automation team to validate end-to-end processes and ensure system reliability.

The aerospace and defense giant implemented Worksoft Certify to automate end-to-end SAP testing and consistently validate processes across its enterprise systems. The solution now supports the company's S/4HANA environment and related integrations—including SAP Concur for expense management and Ryder for logistics—helping the team reduce manual effort, speed up testing, and catch issues before they reach production.

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With Worksoft, Northrop Grumman has cut validation time by more than 85 percent in some areas and gained a reliable way to confirm system health before every release. By embedding Worksoft into its daily operations, the company can keep its most critical SAP business processes dependable and mission-ready.

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“Worksoft has given us a way to run consistent, repeatable tests and catch issues early. That just wasn’t possible when everything was manual.”

— *Tony Morello, Northrop Grumman*

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### The company

With roots dating back to 1939, [Northrop Grumman](#) is a global aerospace and defense leader with 100,000 employees across 550 facilities in more than 25 countries. Its teams design and build advanced aircraft, spacecraft, and defense systems that support national security and scientific discovery. From the James Webb Space Telescope to stealth bombers like the B-21 Raider, Northrop Grumman develops the technologies that keep the world safe.

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## The challenge

With more than 70,000 users depending on SAP to keep Northrop Grumman's finance, supply chain, and manufacturing operations running, even a minor defect could slow production or disrupt critical work. To prevent that, every software update had to be validated before going live, yet testing remained almost entirely manual. Teams used spreadsheets to track test cases and executed each step directly in the SAP GUI. Automation existed, but only in isolated, short-lived efforts. "It was automation as needed," says Tony Morello, Northrop Grumman. "Most of it fell by the wayside. A lot of it was one-and-done."

This manual approach became increasingly hard to sustain, as each test cycle required days or even weeks of hands-on effort to confirm business processes were functioning correctly. Missed steps or inconsistent data often meant additional rounds of testing and delays across multiple departments.

Then, leadership issued a company-wide mandate to increase automation across systems and workflows. "The directive came from the top down through every department to automate as much as you can," says Morello. At the time, his team consisted of just two people supporting dozens of SAP modules and business units. "With a small team, we had to be strategic and focus on where test automation would have the most impact," he explains.

That push for automation came at the right time, as Northrop Grumman was also preparing to migrate from SAP ERP Central Component (ECC) to S/4HANA. With that transition, new systems, integrations, and dependencies would all have to be validated. Without a scalable automation framework, even routine updates risked introducing errors that could compromise data integrity or system stability.

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## The solution

Northrop Grumman adopted Worksoft after running a side-by-side evaluation of several test automation vendors. Each company was given the same SAP test case and asked to show how quickly they could automate it. Competing tools struggled to complete the scenario, requiring repeated troubleshooting and taking days to finish. Meanwhile, Worksoft's solutions engineer completed it in just hours. "Worksoft beat the other automation platforms we evaluated hands down," adds Morello.

The team now uses [Worksoft Certify](#) to document and validate SAP business processes across both ECC and S/4HANA environments. Certify's codeless platform allows them to build and reuse tests without scripting or heavy maintenance, helping standardize automation across the organization.

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As the company continues its S/4HANA migration—now about 80 percent complete—automation has expanded into SAP Fiori, the interface layer within S/4HANA. Fiori is used for many of Northrop Grumman's newer workflows across finance, supply chain, and manufacturing. "Most of what we're automating now is in Fiori," explains Morello. "It's where most of the work happens, so that's where automation really pays off."

Morello's team has also extended automation beyond SAP itself. One example involved integrating with Ryder, Northrop Grumman's third-party shipping and logistics platform. The process automatically creates a shipping document in Ryder's system and brings it back into SAP for validation. "It was a task people weren't sure could be automated," says Morello. "But we showed them that with Worksoft, it could be done."

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## Impact

Worksoft has helped Northrop Grumman accelerate SAP testing and improve system reliability. In SAP Concur, for example, generating an expense report that once took two employees an entire week to complete manually now takes just a few hours with automation—a reduction of more than 85 percent in processing time.

Improvements like that have changed how teams think about testing. Instead of running one-off manual checks, they can now execute complete, repeatable tests directly through Certify. The automation can be triggered as needed, often to prepare for major test events or validate changes before they reach production. "Worksoft has given us a way to run consistent, repeatable tests and catch issues early," says Morello. "That just wasn't possible when everything was manual."

Automation coverage currently sits at roughly 5 percent, with a goal of reaching 20 percent in the next test cycle and continuing to expand from there. Looking ahead, the team plans to bring more business users into the process through [Worksoft Business Capture](#). By allowing users to record their own workflows for automation, Morello hopes to further speed up test creation and expand coverage across departments.

With each new use case, automation is reducing manual effort and giving Northrop Grumman deeper visibility into the health of its SAP environment. Worksoft is now central to how the company maintains system performance as it completes its large-scale S/4HANA migration and expands test automation across the enterprise.