

Carrier Shares the Value of E2E Test Automation for SAP S/4HANA

S/4HANA TESTING

When Carrier Global, a worldwide leader in HVAC systems as well as commercial refrigeration and food service equipment, needed to implement [automated testing for SAP S/4HANA](#) and other high-priority systems, they chose Worksoft. Recently, Judy Zeman, QA Manager at the Carrier Global Corporation, shared her insights with [IT Central Station](#), describing how Worksoft has dramatically improved their testing operation.

Previously, the company had been struggling with time-consuming and complex regression testing and needed a solution that not only provided efficiency but also peace of mind that their systems would continue functioning properly.

"Worksoft's ability to build tests and reuse them is very good," said Zeman. "We ended up obsoleting the tests and not using them with the other tool we used, whereas now, we rerun these, at a minimum, every month."

To face these challenges, Carrier chose to implement [Worksoft Certify](#) for continuous test automation and [Worksoft Capture](#) for process discovery. With continuous automation, the company could achieve its goals to improve efficiency, increase quality and provide company-wide ease-of-use.

Increase Efficiency in E2E Testing in SAP and Non-SAP Apps

By using Worksoft Certify with Fiori, testing integration in and out of Salesforce and SAP S/4HANA, Carrier was able to implement [end-to-end testing](#) and both increase accuracy and reduce the time it would have taken via manual testing.

"We were able to do that whole automation with Worksoft, plugging into Salesforce as well as integrating to S/4 and doing the S/4 automation, back and forth. It's been incredibly useful. We saved something like 80 percent of the time it would have taken to manually test, using this tool."

Testing Speed and Agility for Frequent Application Updates

Testing with packaged applications requires speed and agility to maintain business continuity. For example, SAP S/4HANA has quarterly releases, which means organizations have a small window to test changes and ensure proper functionality before updates hit the system. Worksoft offers the efficiency needed to keep things running smoothly.

"With the release, you don't get to say to SAP, 'Hey, testing is running behind, we need another week,' because it's in the public cloud. Like it or not, they're going live."

Ease-of-Use with Worksoft Capture

For process discovery, Carrier used Worksoft Capture, and found that even those with no prior knowledge of [Worksoft's platform](#) could easily utilize the tool while also continuing to learn more about how it works.

"In terms of using the Capture feature without knowledge of testing tools, we brought on some new support people. One of them is our web support person and she had no background in Worksoft. She's been using it to do all the initial captures for our HVAC Partners. She's been able to use it very easily."

Reusable Tests for Consistent SAP Updates

While Carrier used to run specific tests a single time and then obsolete them, they were able to create automated testing with Worksoft that can be reused time and time again, which allows them to constantly ensure the functionality of their systems and procedures.

"We're releasing changes to [SAP](#) about every two weeks: support tickets, enhancements, maintenance, etc. If a business process changes, then the automated test needs to change to reflect that change. Running them every month, at a minimum, helps make sure that everything is healthy."

Create Logical Test Design and Simplify Systems

As Carrier found out, one of the most notable benefits of functional, automated testing is the prevention of a domino effect, where a programmer or engineer tries to change one small thing but ends up breaking an entire process. Worksoft Certify helped to avoid this.

"The reusability is fabulous if you create the tests properly: no hard-coding, and you're using data tables to hold any of your field selections, and you're using good automation standards."

Drastically Reduce Testing Times

As Carrier has continued to perform test events in different parts of their organization, they continue to see drastic decreases in time. In their Middle East automation, they reduced testing labor by 93% when using Worksoft testing. In many cases in the past, this led to their teams going live and simply hoping for the best.

"Before we started using this tool, everyone was pretty much doing testing manually and test events were taking from two to six weeks. What they did in two to six weeks, we can usually do in one to two days."

Seamless Integration Identifies Defects Prior to Production

While any process is initially going to have defects, the priority is finding them before they go live. With Worksoft test automation, Carrier was able to find small errors that would have led to huge disruptions. Additionally, Worksoft connected Carrier's packaged applications, creating a seamless experience.

"Certify provides codeless, end-to-end process automation across packaged applications. It works well with SAP and Salesforce, for example."