

## **Better together:**

De-risking SAP innovation with the Tricentis SAP solution

# BETTER TOGETHER: DE-RISKING SAP INNOVATION WITH THE TRICENTIS SAP SOLUTION

Since its premiere in the 70s, SAP has become the digital foundation for enterprises across the globe. <u>SAP</u> <u>customers</u> generate 87% of total global commerce, and 99 of the 100 largest companies on Earth rely on SAP to run their business. As these businesses strive to become intelligent enterprises through shifts to SAP S/4HANA and the cloud, their ability to innovate will be intrinsically tied to their SAP environment.

But SAP innovation hinges on two big truths:

- 1. SAP software changes are inherently risky. Due to the complexity of SAP landscapes and their connections to critical business workflows, changes to SAP software can have far-reaching ripple effects that put your company at increased risk. These ripple effects will only extend wider as more parts of your organization connect to SAP systems.
- 2. Data changes are also risky. Intelligent enterprises are only as good as the data they run on. Your data is constantly changing as it flows in, out, and through your SAP systems. These changes can introduce errors that are hard to detect but carry heavy penalties, both financially and to your company's reputation.

These are prime examples of why quality assurance needs to be included in the earliest stages of your SAP innovation process. And just as business is becoming more digital and connected, so must your quality assurance strategy.

Long manual testing cycles were sufficient enough when companies only updated their SAP software every few years (if that). Updates were typically followed by a lengthy period of hypercare to address all the defects that slipped through manual tests.

But in today's increasingly Agile digital business environment, speed matters and quality can't wait.

Now, companies must keep up with SAP's quarterly cloud update schedule, and custom updates are fast becoming the norm. Given these changes, traditional test cycles are now painfully long (<u>23 days</u> on average), hypercare is unsustainably expensive (yet expected <u>by 75%</u> of SAP users), and decisions can feel like a shot in the dark.

SAP-powered enterprises around the world have used the Tricentis testing portfolio not only to improve the quality of their SAP updates, but also to add an additional motor for progress and innovation.

<u>Forrester Research</u> found that Tricentis helped companies achieve:

- 67% reduction in application time-to-release
- 78% reduction in production errors
- 12.5x to 25x increase in performance testing frequency
- 99% reduction in performance test maintenance costs
- 90% reduction in hypercare costs
- 334% ROI within three years

Today scalable, reliable SAP testing is no longer a nice to have; it's mission-critical. Your QA strategy needs to be augmented to both accelerate and de-risk your SAP innovation.

That's where Tricentis can help.

#### > The Tricentis enterprise testing ecosystem: Recommended by SAP for a reason

Tricentis offers a complete toolkit for every SAP testing scenario, from on-premises ECC updates to S/4HANA migrations to running your business in the cloud.

Our codeless, Al-driven platform enables teams to shift testing left, frees your most technical resources from rote, manual tasks, and accelerates time to value from the start. We're <u>SAP's recommended testing</u> <u>solution and included as a part of its Activate Methodology</u>. Our comprehensive solution can help you mitigate risks and begin executing on an effective testing strategy on day 1.

The Tricentis SAP solution at a glance:

- <u>Tricentis LiveCompare</u><sup>™</sup> provides SAP teams with AI-powered analytics and insights that significantly reduce the risk, time, and cost of delivering and supporting changes to SAP environments by pinpointing the highest-risk areas.
- <u>Tricentis Tosca</u> is a market-leading end-to-end test automation technology that accelerates innovation across your enterprise by taking the bottlenecks out of testing with a resilient, codeless approach.
- <u>Tricentis NeoLoad</u> is a continuous performance and load testing tool that can verify that SAP updates and upgrades meet performance, capacity, and usage requirements for all use cases, from APIs and microservices to end-to-end, system-wide testing.
- <u>Tricentis Data Integrity</u> is an end-to-end, automated data testing solution that enables you to improve the quality of your analytical and operational data at scale and preserve its integrity during updates and upgrades.

## KNOW WHAT TO TEST WITH TRICENTIS LIVECOMPARE

Ninety percent of SAP customers plan for their releases to fail. This isn't news to SAP teams, who routinely add a period of hypercare post go-live to remediate any errors in production after a release. Organizations should look for a solution that allows them to peer into the risks changes pose to their SAP systems, see if risks have been addressed before release, and prevent defects in production through real-time analytics and insights.

In short, they need a tool that can help them incorporate change intelligence into their overall SAP process.

<u>Tricentis LiveCompare</u> is the ultimate change intelligence solution for SAP, helping companies pinpoint and mitigate risks using laser focused AI.

LiveCompare deploys into your organization's SAP system and takes a snapshot of your current configuration and usage, then compares that snapshot against a proposed standard or custom update. Its AI-driven analysis automatically identifies risks posed by an update to your SAP business processes, integrations, custom code, and more. LiveCompare also flags which processes face the most risk after a change.

Equipped with this knowledge, your team can focus its test scope to narrow in on the areas that will be impacted and prioritize tests that cover the most risk.

LiveCompare works on SAP updates of all sizes:

- Small changes: Transports and ChaRM IDs from internal teams and custom code changes
- Large changes: Service Packs (SPs) and Enhancement Packs (SP) from SAP
- Massive changes: SAP S/4HANA conversions, system consolidations, and upgrades

### > Why it matters

On its own, impact analysis can revolutionize your testing process. If you're like most enterprise QA teams, you are both <u>under-testing and over-testing</u>. At Tricentis, we've found that:

- 80% of your business risk can be covered by 20% of your tests.
- Teams who can't perform impact analysis typically reach just 40% risk coverage.
- 67% of tests in the average enterprise test portfolio are redundant or low-performing.

LiveCompare can declutter your test library and accelerate your testing cycles by identifying both the high value test cases that cover the highest-risk areas, as well as the low-value or duplicate tests that are making your test suite slow to execute and difficult to maintain.

#### **>** Outcomes

LiveCompare users often eliminate hypercare costs completely. If there are problems post-release, LiveCompare can troubleshoot the root cause and improve the overall testing process.

The foresight afforded by LiveCompare isn't just good for the QA team – it helps everyone prepare for a smooth release. You can notify business users before launch, so they can hit the ground running. Keeping them all on the same page can prevent knowledge silos and slow adoption periods that cause support bottlenecks, productivity dips, and delayed time-to-value.

## KNOW YOUR SOFTWARE WILL WORK WITH TRICENTIS TOSCA

Low automation rates are a big culprit behind slow release cycles. This is problematic enough for customers today. It will become an even bigger burden once your SAP environment is moved to the cloud. No matter your current level of automation, figuring out how to scale to meet the requirements of frequent cloud releases can be overwhelming. Factoring in the maintenance and resource burden of most scripted automation tools and the complex business processes unique to SAP, leveling up your automation becomes even more daunting.

We like to think of <u>Tricentis Tosca</u> as the heavyweight champion of enterprise test automation. It's our codeless, model-based tool that can easily handle the intricate end-to-end processes that other tools struggle to automate. It works like this:

Tosca scans an application's UI or APIs to create business-readable automation models four times faster than it would take to code them. These models become Lego-like building blocks that can be combined and reused to create all of your test cases. With Tosca's Vision AI engine, UI tests can be automated based on a mockup, before code is written, to enable a true shift left.

Tosca solves the maintenance conundrum that prohibits teams from expanding automation above 40%. If your application changes, you can simply rescan the affected model, and Tosca automatically syncs that change across all impacted test cases. And because Tosca supports 160+ technologies, it can be used to automate both complex workflows within SAP, as well as those that integrate with external technologies.

Together, LiveCompare and Tosca help teams take the guesswork out of test selection. LiveCompare can perform a test coverage analysis of your Tosca repository, flagging the test cases that support your highest risk objects. LiveCompare will then automatically add these tests to an execution list in Tosca. If LiveCompare can't find a test for an object, it adds a requirement in your test plan to create one and provides the names of business users who are familiar with the object. LiveCompare can also pinpoint which test cases are relevant to a particular scenario, even if an at-risk object has a dozen associated test cases.

## > Why it matters

SAP projects can be incredibly unwieldy and expensive. Even if organizations manage to stick the landing in their migration, S/4HANA's quarterly release cycle could spell disaster for the <u>90% of SAP</u> users who rely on manual testing and the <u>60% of SAP</u> users who rely on business users to perform that testing.

Tosca's model-based test automation can help deliver the value SAP users are hoping to attain in their instances, providing an automation solution that enables the speed and scale necessary to complete an S/4HANA project.

**Tosca enables true end-to-end testing**. Without the ability to test end-to-end scenarios, you simply can't have full confidence in your release or your transformation. Between Tosca's Service Virtualization functionality and its native integrations with hundreds of third-party apps and platforms, your team can unlock end-to-end testing at unprecedented speeds and scale.

**Tosca solves for test data management**. QA testers spend <u>between 40% and 60% of their time</u> manually wrangling test data, which still results in a <u>22% rate of false positives</u>. 90% of tests can be run with synthetic, Tosca-generated data, resulting in a drastically reduced rate of false positives.

**Tosca democratizes testing**. Its no-code approach lets less-technical business users take on some of the testing burden, offering a fast path to automation while relieving your higher-skilled staff for more technically intense work.

### **>** Outcomes

Tosca makes automation scalable and sustainable, solving some of the biggest hurdles in an S/4HANA migration and transforming QA testing into <u>a tangible value-add</u> for your organization.

## KNOW IT WILL SCALE WITH TRICENTIS NEOLOAD

Because of SAP's ability to be heavily customized, performance testing for SAP systems is often pushed back to the very end of a project. This short sighted move means there isn't always time to fix performance issues before the release, and instead they are addressed during hypercare when they are more expensive to fix.

<u>Tricentis NeoLoad</u> simplifies and scales performance testing for all SAP use cases, from S/4HANA migrations to end-to-end SAP business process testing. NeoLoad offers native support for traditional, on-premises SAP environments as well as for hybrid and cloud deployments. It works like this:

NeoLoad performance tests SAP GUI, Fiori, and S/4HANA applications under load, simulating complex user behavior for accurate analysis. It can simulate even the most complex transactions and scale load tests up to thousands of SAP virtual users.

NeoLoad bridges the gap between your performance testing experts and non-experts. It is easy to learn and use, with the option to create codeless tests through a graphical visual interface or design and run performance tests as code.

NeoLoad delivers test results as the test is being run, and even more in-depth reporting upon test completion, logging pass/fail performance SLA validation, so you can react faster when you detect an SAP performance bottleneck and accelerate the deployment phase. NeoLoad also integrates with other testing and DevOps tools, offering a unified view of performance engineering metrics across all phases of release and delivery.

## > Why it matters

S/4HANA S/4HANA is structured quite differently from its predecessors. A single SAP GUI transaction in a prior SAP version may now take place across several Fiori apps in S/4HANA. Conversely, functionalities from several SAP GUI transactions may be consolidated in one Fiori app.

This holds big implications for performance testing, as you must translate tests to fit this new schema. NeoLoad and the broader Tricentis toolkit were built to service both legacy and modern SAP versions from one interface, whether your instances live on-prem, in the cloud, or in a hybrid infrastructure.

**NeoLoad's built-in integration with Tosca** enables teams to reuse their functional test assets as performance test scripts. This enables your users to quickly adopt and scale continuous performance testing using the same tests.

With NeoLoad, QA teams can run continuous, automated smoke tests as part of their overnight builds, driving more impactful insights and enabling a true shift-left for performance testing.

### > Outcomes

With NeoLoad, SAP users can enjoy <u>80% faster test design and maintenance while eliminating 90% of</u> <u>production issues</u>. This facilitates continuous, reliable releases and drives value from your performance experts.

A unified approach ensures all teams measure performance consistently and obtain apples-to-apples results. Consistent reporting, root cause analysis, and trend reporting become much simpler.

Rather than assuming responsibility for all performance testing operations, your performance experts can build frameworks, structure test environments, implement quality control guardrails, stand up automated CI pipelines, and embed best practices that allow non-experts to contribute to testing with NeoLoad's no-code approach.

## **KNOW YOUR DATA IS ACCURATE – WITH TRICENTIS DATA INTEGRITY**

Data is the lifeblood of modern organizations. However, <u>nearly one-third of</u> SAP customers named data errors as a huge challenge in driving value from their SAP systems. This is likely because data testing is mostly done through manual means or spot testing, leaving inaccuracies to be discovered only after they've done significant damage to your business.

<u>Tricentis Data Integrity</u> is a codeless, end-to-end, automated data testing solution that can help you ensure that your data stays correct as it travels from its source through your data warehouse to your BI tools and business processes, including at the data, API, and UI layers – no SQL necessary!

Tricentis Data Integrity lets you create custom automated tests at points in the data journey where data is likely to break. It can test 400,000 rows per minute while automatically generating an audit trail that helps you catch errors and pinpoint root causes before they compromise your business intelligence decisions.

#### > Why it matters

Compelling business intelligence is impossible without reliable data. Tricentis Data Integrity ensures your analytics, reports, and business processes all contain correct data, even as your applications and data ecosystem live in a state of constant change and evolution.

With Tricentis Data Integrity, you can increase the confidence and speed of SAP BW updates and ensure SAP updates, upgrades, and migrations don't negatively impact data that flows through your SAP systems.

### **>** Outcomes

No matter where you're at currently, you know this – the future of your IT landscapes, like SAP, includes more complexity, more data, and higher stakes.

<u>Tricentis Data Integrity</u>'s end-to-end, automated, and continuous capabilities catch errors in your analytical and operational data before they damage your business. As it travels from your source systems and data warehouses to your reports and business processes, Tricentis Data Integrity ensures your data arrives intact and fit for purpose, at the scale you need to thrive.

With higher quality data, you can make informed decisions about SAP optimization, modernization, and innovation, leaving operational errors and reporting issues behind. Tricentis Data Integrity helps drive better business outcomes through trustworthy data, helping companies achieve results like these:

- Testing up to 400,000 rows per minute
- As high as 95% automation rates
- As much as 4x cost savings over manual data integrity testing

## TRICENTIS PLATFORM + SAP: WHY WE'RE BETTER TOGETHER

Together, the Tricentis SAP platform outlined above offers a complete, comprehensive quality engineering solution for any SAP scenario. Every tool integrates seamlessly to help power your transformation and modernization initiatives.

Our platform integrates with SAP Solution Manager, SAP Cloud ALM, and we're included as a Solution Extensions partner for the SAP Activate methodology, ensuring support for all generations of SAP software – no matter if you run on-premises, on the cloud, or on a hybrid solution.

Through our partnership, we will continue to innovate with SAP so that you can always rely on the Tricentis platform to help you seamlessly take advantage of the latest SAP software and solutions.

DISCLAIMER: Note, the information provided in this statement should not be considered as legal advice. Readers are cautioned not to place undue reliance on these statements, and they should not be relied upon in making purchasing decisions or for achieving compliance to legal regulations.



## **ABOUT TRICENTIS**

**Tricentis is a global leader in enterprise continuous testing.** The Tricentis Al-based, continuous testing portfolio of products provide a new and fundamentally different way to perform software testing. An approach that's totally automated, fully codeless, and intelligently driven by Al. It addresses both agile development and complex enterprise apps, enabling enterprises to accelerate their digital transformation by dramatically increasing software release speed, reducing costs, and improving software quality. Widely credited for reinventing software testing for DevOps, cloud, and enterprise applications, Tricentis has been recognized as a leader by all major industry analysts, including Forrester, Gartner, and IDC. Tricentis has more than 2,500 customers, including the largest brands in the world, such as McKesson, Accenture, Nationwide Insurance, Allianz, Telstra, Dolby, and Vodafone.

To learn more, visit <u>www.tricentis.com</u> or visit one of our locations, <u>www.tricentis.com/locations.</u>