

SAP Solution Brief
SAP Services



IMPROVE APPLICATION RELIABILITY AND PERFORMANCE WITH ACCELERATED TESTING

**Automated Procedures Reduce Testing Time
and Costs**

To ensure success with new applications, you need to test them thoroughly. But increased demands for new technology and constricted timelines and budgets wreak havoc on the application testing process. The SAP® Services organization resolves this dilemma with innovative testing services that result in a solid testing strategy. Taking the guesswork out of application change, these services lower risk, increase productivity, and improve resource allocation.

To remain competitive in today's constantly evolving business environment, you must be able to adapt to change quickly. This demands that new business processes, incorporated via software upgrades, enhancements, or new implementations, operate without fault before they reach the user base. Any change to your systems has the potential to disrupt your business. Rigorous, thorough, and ongoing testing helps ensure the right business outcomes and diminish risk. But all too often, testing processes are compressed or sacrificed to meet a specific launch date or reduce costs, circumstances that can impact the performance of your applications as well as customer satisfaction.

The SAP® Services organization offers a solution: comprehensive testing services that help ensure the quality, performance, and reliability of your SAP business applications. These services enable you to adapt to change quickly, easily, and cost-effectively by applying a test strategy that supports your organization throughout the life of your SAP applications.



The Value of a Comprehensive Testing Strategy

With testing services from SAP, you can quickly evaluate your software landscape to improve the quality and performance of your SAP applications and resulting business processes. Experts from SAP Services first create a testing strategy developed for your unique business – a strategy you can leverage to build a best-of-breed testing center of excellence (COE). Next they help you execute this strategy using your resources. They also provide knowledge transfer and enable you to develop reusable testing assets and libraries. Finally, they accelerate testing cycles through the right use of automation and improved resource utilization. As a result, you can offer your entire population of end users and customers reliable, high-performing business applications they can count on. The combination of SAP testing products and services described below can streamline your testing practices and make your testing vision a reality.

SAP Test Acceleration and Optimization Application

The SAP Test Acceleration and Optimization application provides preconfigured automated functional test components for many of the major and most commonly deployed SAP business processes, reducing traditional testing efforts by 70%. It enables end-to-end business process testing as well as automatic testing of mission-critical business processes. Building on the SAP Quality Center application by HP, SAP Test Acceleration and Optimization provides the most robust testing solution available for SAP customers.

SAP Test Data Migration Server

The SAP Test Data Migration Server software lets you take a more agile approach to automated regression, functional, and business-process testing by enabling you to create small, easy-to-use test environments and populate them with a manageable set of up-to-date, business-relevant test data. This approach helps ensure consistency in the live software environment. It also enables you to minimize infrastructure and maintenance expenses and maximize the effectiveness and accuracy of the nonproductive systems used for testing, quality assurance, and training.

SAP Solution Manager

The SAP Solution Manager application management solution speeds test preparation and execution. It gives you a single point of access to the complete software landscape and provides central data storage so you can reuse testing materials in subsequent projects and access test results to support cross-component tests. Integrated with SAP Quality Center, SAP Solution Manager lets you initiate testing as you configure process structures. And because it is also integrated with your issue-handling software, it helps you resolve problems efficiently.

Determine the Best Fit for Your Needs

With testing services from SAP, you can leverage the expertise of the SAP Consulting organization and SAP partners. SAP consultants work with you to implement a business-driven testing solution for your end-to-end processes – a solution that can be used and reused throughout the life of the application. The services outlined in this section help you determine the testing service that best meets the needs of your organization.

Testing Center-of-Excellence Service

The testing COE service is a complete, robust testing solution that fulfills all your testing needs. It includes a test strategy and assessment, software implementation, configuration, execution, validation, hands-on mentoring, and best use of your resources – both on-site and off – to run and maintain your tests. Experts from SAP Services prepare the strategy for testing, create the tests, develop the test plan, and execute all types of testing including functional, integration, performance, unit, regression, user acceptance, migration testing – and more. The COE service also includes a final audit, implemented before go-live, and a maintenance plan to be used going forward.

Testing-Strategy Assessment Service

The testing-strategy assessment service helps you design a strategy and road map that ties back to business demands and meets your immediate and ongoing application and performance testing needs. The assessment service results in a robust plan and framework for all types of testing (automated, functional, regression, performance, and so forth). It also provides guidelines for ongoing software testing and tuning. The results of this service are often used to formulate a business plan that improves quality. The testing-strategy assessment service typically comprises the following steps:

Step 1: Analyze current situation

- Review current business requirements and process documentation
- Assess technical environment
- Review existing business-process road map and findings
- Gather additional company-specific business and technical information

Step 2: Define future testing position

- Define future plans for test procedures
- Validate business drivers
- Define potential business collision points
- Assess overall readiness to begin testing
- Map testing resources
- Align testing enablers
- Identify solution gaps
- Develop initial implementation plan

Step 3: Develop testing road map

- Build high-level deployment plan
- Develop risk-mitigation plan
- Develop program-delivery plan
- Validate road map with IT and business stakeholders

Accelerated Testing Service

By accelerating and automating your testing cycles and testing earlier in the software development life cycle, you can confidently complete testing that is both thorough and accurate before applications go live. The accelerated testing service enables you to develop component-based testing scripts and libraries that can be reused every time an application undergoes change. Several testing applications can be used to execute this service including SAP Test Acceleration and Optimization, the SAP LoadRunner application by HP, and SAP Quality Center. The accelerated testing service typically comprises the following steps:

1. Review end-to-end business processes
2. Review existing testing program baseline
3. Develop project documentation and provide guidance that includes:
 - Testing project plan
 - Requirements for deployment of the testing applications
 - Testing design documentation for transactions and business processes
 - Standards for testing components and script creation
 - Script execution guidance
4. Provide hands-on mentoring covering script design, creation, and execution
5. Enable testing best practices for ongoing testing execution excellence

At the conclusion of this service, you have an automated scripting process that can be reused regularly to ensure application functionality and quality. More important, you have a process that can ensure your applications meet the business needs of your end users.

Performance Testing Service

Nothing increases end-user frustration or erodes customer loyalty more than business application failure or long response times. With thorough, accurate, and automated performance testing of your SAP applications, you can determine the breaking point for your software system and response-time thresholds to mitigate these critical business risks.

The performance testing process from SAP Services utilizes SAP LoadRunner to cover the three most important areas of performance: volume, endurance, and elasticity. Volume performance testing (capacity testing) provides data on the maximum use of an application. Endurance testing provides data on the stability of the software under a constant user load. Elasticity testing measures the ability of the software to properly handle the logging on and off of its users.

The performance testing services include recommendations that enable you to establish best practices for performance testing and a robust performance-testing life cycle that results in an improved customer experience. You can choose the offering most appropriate for your business needs:

Level 1

- Installation, configuration, and setup of SAP LoadRunner
- Up to 5 scripts: 3 simple, 1 standard, 1 complex
- 5 weeks – 4 weeks of installation, design, and development; plus 1 week of test execution for a single test cycle

Level 2

- Installation, configuration, and setup of SAP LoadRunner
- Up to 10 scripts: 5 simple, 3 standard, 2 complex
- 8 weeks – 7 weeks of installation, design, and development; plus 1 week of test execution for a single test cycle

Level 3

- Installation, configuration, and setup of SAP LoadRunner
- Up to 15 scripts: 7 simple, 5 standard, 3 complex
- 9 weeks – 7 weeks of installation, design, and development; plus 2 weeks of test execution for 2 test cycles

Reap the Business Benefits

By using testing products and services from SAP, you can be assured of delivering high-performing business outcomes – on time and within budget – while executing, upgrading, or modifying existing business processes. Working with SAP Services, you can count on the following benefits:

- Vastly simplified testing, automation, and reusable test artifacts
- Improved testing accuracy
- Reduced costs on all software change events
- Accelerated testing of your business processes
- Lower business risk, resulting from better testing coverage
- Improved ROI testing via script reusability
- Increased ability to absorb and manage change
- Tighter integration with SAP Solution Manager

Learn More

To find out how the testing offerings provided by SAP Services can help your organization adapt to change quickly and safely, please visit us online at www.sap.com/usa/services/consulting, call us at +1 866-609-1124, or contact your SAP client partner.