Test Automation Services
Test Automation Quick Start for SAP Projects

SAP Consulting
Agenda

Overview
- Test Automation challenges in SAP Projects

Test Automation Quick Start in Detail
- TAF (Test Automation Framework) & TCE (Test Composition Environment) – Technical Set Up
- CBTA (Component Based Test Automation) – Technical Set Up
- SUT (System under Test) – Technical prerequisites for Test Automation
- Automated Test Cases
- Training & Coaching

Summary
Overview SAP Test Automation
There are three key drivers for testing...

<table>
<thead>
<tr>
<th>Business Drivers</th>
<th>Compliance Drivers</th>
<th>Technology Drivers</th>
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<tbody>
<tr>
<td>Changed business processes</td>
<td>Governance</td>
<td>Maintenance</td>
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<td>M &amp; A and reorganizations</td>
<td>Risk management</td>
<td>New functionality</td>
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<td>New products, vendors</td>
<td>Compliance</td>
<td>Upgrades</td>
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<td></td>
<td>Examples: SOX, SEC, FDA, Basel 2</td>
<td>Global rollouts</td>
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...these change events impact the life cycle of enterprise solutions...

...manual testing of all changes is costly and error prone

...insufficient testing can cause higher risks for failure in production

...there is a need to minimize the cost for individual test runs
Project Managers / Customers Requirements

We really need a solution…

- That allows us to start immediately
- That is well-proven in other SAP projects
- Where skilled test experts support and train our team members
- Reasonably priced and available at a fixed price
- …and we need a professional test automation tool, but we don't have budget for expensive licenses
The Solution: SAP’s Test Automation Quick Start

Test Automation Quick Start for SAP solutions contains everything you need for a professional test automation

- **Test Automation Framework** – Basic Configuration in SAP Solution Manager
- **Test Composition Environment** – Basic Configuration in SAP Solution Manager
- **Component Based Test Automation** – Basic Configuration in SAP Solution Manager
- **System under test** – Basic Configuration for Test Automation in one system under test
- **Test Automation** – Automation of 3 SAP GUI based test cases
- **Trainings** – For testers

*Business Process Change Analyzer is available for customers with Enterprise Support*
Advantages at a Glance

Complete and established solution
Test Automation Quick Start Service contains everything you need for a successful SAP project and is based on SAP’s best practices

Skilled Trainers
Our trainers have many years of test automation experience and will enable the project team to a trouble free start into test automation

Cost-Efficient
No additional license costs for Test Automation Framework and CBTA in SAP Solution Manager
Complete fix price solution

Immediately ready for use
Pre-configured tool installation, standardized test plans and field-tested trainings allows a quick project start
Test Automation Quickstart Service
Test Automation Framework
How does it work in the test automation process?

Test Automation Framework & Test Composition Environment

Test Design
- Seamless integration between SAP Solution Manager and test tools from SAP and Partners
- Test Data Container (TDC) provide test data for test script parameters
- Central management of System under Test

Test Execution
- Start of automated tests from Workcenter Test Management
- Ad-hoc start or scheduler for unattended execution
- Integrated test execution logs from partner tools

Test Result Analysis
- Test Manager can view test results from manual and automated tests in one environment
- Status and progress reports
- Integrated partner reports

Accelerated Repair
- Workflow between Tester and Test Engineer to trigger test case repair
- Rich environment for Test Engineer to analyze problems and perform repair activities

Non-SAP
Test Automation Framework

How is an unattended test execution realized?

Scheduling
Scheduling of unattended automated tests in local or remote locations

Test Execution
Unattended execution of automated test on Test PCs

Analysis
Notification about test execution status and failure analysis

Test Engineer

Test System Landscape

Business Analyst

Test result analysis
Component Based Test Automation (CBTA)
The cost efficient test automation tool

Business Process “Order to Cash”

Quotation  Sales Order  Delivery  Goods Issue  Billing

Component Based Test Automation (CBTA)

Business Analyst executes *business transaction via CBTA*

CBTA creates test script based on *test components during execution*

Test Composition Environment (TCE)

**Attributes**
- Business Transaction
- Systems under Test

**Parameters**
- Parameters for test data inputs
- Dynamic handover between scripts
- SAP delivered test components
- On the fly generated components

**Script Components**

**Test Data**
- Data defined in Test Data Container
- Test Data Assignment Wizard
Component Based Test Automation (CBTA)
How does it work in your test automation process?

CBTA enables your Business Analysts to build component-based test scripts which are highly flexible and easy to maintain

Component Based Test Automation (CBTA)

– Functionality
  - CBTA Test Creation Wizard for test script creation by Business Analysts
  - CBTA test scripts are composed by reusing SAP delivered default components and customer specific screen components
  - Fast repair of damaged test scripts
  - Supported UI technologies: SAPGUI, SAP CRM web-client

– Availability
  - Availability: with SAP Solution Manager 7.1 SP07
  - License: included in SAP Enterprise Support contract
Components of the solution

For Solution Manager

– Standard configuration TAF & TCE
– Standard configuration CBTA
  ▫ Including provisioning of required notes
– Support for configuration required RFC-connections to one SUT
– Creation of System Data Container

For System under Test

– Support for implementation of required notes and roles in one SUT
– Automation of 3 SAP GUI based test cases each of
  ▫ max. 5 transaction
  ▫ max. 5 screens
  ▫ max. 5 input values per screen
SUT & Test Automation

System under Test
– Support for implementation of required notes and roles in one SUT
– Automation of 3 SAP GUI based test cases each of
  ▫ max. 5 transaction
  ▫ max. 5 screens
  ▫ max. 5 input values per screen
Training & Coaching

Test Automation Quick Start - Trainings
– Full training (one day) on Test Automation Framework, Test Composition Environment and CBTA in SAP Solution Manager for:
  ▫ up to five Test Automation Experts
– With practical exercises
– Training documentation
More SAP Consulting Services

Installation & Operations Setup for SAP Solution Manager
SAP is the right partner for you if you need to install SAP Solution Manager or upgrade to the latest version.

Load- and Performance Test
Load testing is performed to determine a system’s behavior under both normal and anticipated peak load conditions.

Service “Regression test with Business Process Change Analyzer”
With Business Process Change Analyzer it is possible to perform change impact analysis and helps you to minimize the effort for regression testing.

Test Management for SAP Projects
Quick Start into professional Test Management within SAP projects. This service is available in different t-shirt sizes for fixed prices.
Test Automation Quick Start Service enables your team to test SAP solutions professional and ensures project success.

- With Test Automation Quick Start Service teams are able to perform test automation fast and cost-effective.
- SAP Solution Managers Test Automation Framework and Component Based Test Automation are ready for usage, no additional license costs.
- Professional trainings by experienced and certified SAP experts.
Why **SAP Consulting** as implementation partner?
SAP Consulting is a experienced implementation partner

Experience

- 10+ years experience with Test Management
- Average of 6 years Test experience per consultant
- Average of 20 test projects / year

Fast & efficient delivery

- Standardized services
- Standardized delivery methods
- Short project durations

Team

- 8+ specialized consultants
- Experiences as test manager, test automation experts, and performance tester
- Knowledge of other ALM processes available
Thank you.

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