SAP Solution Manager 7.2 – Test Suite

Overview of Deltas for SSM 7.2 SPS 07

Solution Management, DBS, SAP SE
May 18, 2018

PUBLIC
Agenda

1. SAP Solution Manager 7.2 – Test Suite Overview

2. SAP Solution Manager 7.2 Test Suite – delta functionality for SPS 07
   - Cross Test Suite
   - Test Plan Management
   - BPCA
   - Test Automation
   - Analytics

3. More Information
SAP Solution Manager 7.2 Test Suite
SAP Solution Manager - Test Suite
A full-blown application for manual / automated testing and change impact analysis

Functional Scope

- Manual and automated functional tests
- Automated change impact analysis of maintenance activities for test scope optimization of regression tests
- New requirements triggering semi-automated test planning for user acceptance tests and functional integration tests
- High degree of test automation possible
- Supports agile development approach within requirements-to-deploy process through Focused Build for SAP Solution Manager
- Seemlessly integrated with SAP Solution Manager Process Management, Solution Documentation, ChaRM, ITSM, …

SAP and non-SAP Solutions

- SAP Business Suite
- SAP S/4HANA (On-Premise, Cloud Edition)
- Non-SAP applications (On-Premise, Cloud)

Integration

- Test system refresh
- Partner: test data identification, validation and provisioning
- Partner: test automation tools

Single Source of Truth

- All related information in 1 central SAP Solution Manager system
- No complex data replications

The Test Suite of SAP Solution Manager 7.2 is a comprehensive test solution fitting the needs for the vast majority of SAP customers
SAP Solution Manager – Test Suite
Capabilities

Solution Documentation
- Executable Library
- Process Step Library
- Business Processes

Test Cases
- Manual Tests
- Automated Tests

Test Plan Management
- Test Plan
- Test Packages
- Test Sequences
- Tester assignment

Test Execution
- Manual Test Execution
- Automated Test Execution
- Defect Management

Test Suite Analytics
- Gap reports
- Status reports
- Progress reports
- Dashboard

Change Impact Analysis
Scope and Effort Analyzer (SEA)

Test scope estimation before upgrade

Test scope optimization during change events (fix, enhance, innovate, upgrade)

Business Process Change Analyzer (BPCA)

Test Data
SAP TDMS
- Lean test system setup and refresh

Test Data Container (TDC)
- Test data storage for manual and automated tests

DeceSoft DTD (test data identification, validation and provisioning)

Test Automation Framework
SAP Test Suite - CBTA (Component Based Test Automation)

- MicroFocus UFT
- WorkSoft Certify
- Tricentis Tosca
- Other 3rd party

Supported UI technologies by CBTA: SAPGUI, WD-ABAP, CRM Web-Client, SAPUI5, Fiori, …

Partner test tools: SAP and non-SAP UI technologies
SAP Solution Manager - Test Suite

Test Suite for SAP S/4HANA

- SAP Solution Manager 7.2 – Process Management will be used to import SAP Best Practices and document business processes used in S/4HANA (On-premise or Cloud edition)

- SAP Solution Manager 7.2 – Test Suite will be used for manual and automated tests of implemented or changed business processes for all functional test types

- Business Processes are acticated from SAP Best Practices and / or customer defined process implementation
- Business Processes are based on SAP standard software and optional custom code, modifications and integrated partner apps

- Business Processes are activated from SAP Best Practices plus limited extension options
- Business Processes are based on SAP standard software and optional extensions using white-listed APIs and partner apps
## Most Common Vendors for SAP-Centric Test Management

<table>
<thead>
<tr>
<th>Functional Test Organization</th>
<th>SAP Solution Manager</th>
<th>Micro Focus*</th>
<th>Other vendors</th>
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<tr>
<td>Manual Tests</td>
<td>Test Suite</td>
<td>Application Lifecycle Management (ALM)</td>
<td>Tricentis Tosca Testsuite</td>
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<td>Scope and Effort Analyzer (SEA)</td>
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<td>Component-based Test Automation (CBTA)</td>
<td>Test Automation Framework</td>
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<td>Worksoft Certify Tricentis Tosca Test Automation</td>
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<td>Test Automation Framework</td>
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<td>LoadRunner</td>
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<td>Fortify</td>
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**Legend**

- **SAP Solution Manager and complementing tools**
- **Alternative products with overlapping functionality to SAP Solution Manager**
  (requires additional integration and on-going data replication)

* Former software division of Hewlett Packard Enterprise is now part of Micro Focus
SAP Solution Manager 7.2 – Test Suite
Delivers all you need


✓ On-premise, Cloud, Hybrid: Supports functional tests for on premise, cloud and hybrid solutions

✓ All under one Roof: no integration setup and ongoing data replication required

✓ Integration: seamless integrates with project management, process management, change and release management, defect and incident management, custom code management

✓ Requirements to Deploy: Supports waterfall and agile development approaches, including Enterprise DevOps

✓ Manual Tests: Easy to use manual tests for business users

✓ Automated Tests: for all SAP and non-SAP processes – certified integration of market-leading partner test tools for test planning, execution and reporting

✓ Test Data: semi-automatically identify, validate and provide suitable test data for all tests

✓ Change Impact Analysis: reduce test scope based on software changes and smart calculations

✓ Test Planning: automatically proposes test plan fitting the needs of the upcoming test cycle

✓ Analytics: automatically provides full transparency of test status and test progress for all involved parties
Delta Functionality SPS 07
Overview for Test Suite
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<th>Functionality</th>
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<td>Test Plan Management</td>
<td>Performance improvements</td>
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<td>New application: Assign Testers</td>
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<td>BPCA</td>
<td>Additional information about change transactions on selection screen</td>
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<td>Automated Tests</td>
<td>New application to view and analyze test automation logs</td>
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<td>CBTA: multi-browser support for recording of automated tests</td>
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<td>Analytics</td>
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<td>KPIs for manual testing: Additional Tiles and KPIs</td>
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Cross Test Suite SPS 07 delta features
SAP Solution Manager 7.2 SP07 - Test Suite
Test Suite integration with other SAP Solution Manager ALM scenarios

Integration of entity Scope

- Complete integration of SAP Solution Manager entity Scope in Test Suite

Details

- Entity Scope is successor of entity View – now with advanced filter capabilities, such as dynamic attribute interpretation at runtime
- Entity View was replaced with entity Scopes in all Test Suite applications
- Example: Test Cases assigned to nodes in Solution Documentation with country dependency. Country-specific Test Plan generation using Scope that determines nodes for specific country plus country-independent nodes.
SAP Solution Manager 7.2 SP07 - Test Suite
Test Suite integration with other SAP Solution Manager ALM scenarios

Integration of entity Project
• Complete integration of SAP Solution Manager entity Project in Test Suite

Features
• Test Plan Management: selection of Project and derivation of related entities like Solution, Branch, Scope
• BPCA: Test Plan generation including assignment to project
• Multiple Test Plans can be assigned to a Project
• Test Suite Analytics: Project as new selection criteria
SAP Solution Manager 7.2 SP07 - Test Suite
Test Suite integration with other SAP Solution Manager ALM scenarios

Project

Defect(Incident)

If Test plan is associated with a Project and a new Defect is created, seamless handover of Project and Solution information to the Defect (Incident)
Integration of entity Site

- Complete integration of SAP Solution Manager entity Site in Test Suite

Details

- Combination of Solution and Branch can be Site enabled
- Site is used in Test Suite to determine the relevant managed systems / clients
- Test Plan is Site-specific for Site-enabled Solution / Branch
- BPCA generates Site-dependent semi-dynamic TBOMs
- Test Suite Gap and Completeness Reports with Site-specific information

<table>
<thead>
<tr>
<th>Site</th>
<th>DEV</th>
<th>QAS</th>
<th>Pre-PRD</th>
<th>PRD</th>
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<tbody>
<tr>
<td>Global</td>
<td>D1/100</td>
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</tr>
<tr>
<td>Region 1</td>
<td>Q1/100</td>
<td>PP1/100</td>
<td>P1/100</td>
<td></td>
</tr>
<tr>
<td>Region 2</td>
<td>Q2/100</td>
<td>PP2/100</td>
<td>P2/100</td>
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</tr>
<tr>
<td>Region 3</td>
<td>Q3/100</td>
<td>PP3/100</td>
<td>P3/100</td>
<td></td>
</tr>
</tbody>
</table>

Simple example of managed systems / clients when using
- central DEV system and
- multiple Site-specific QAS – PRD systems
Test Plan Management SPS 07 delta features
SAP Solution Manager 7.2 SP07 - Test Suite
Test Plan Management: Performance

**Application: Test Plan Management**

- Significant performance improvements for test case selection in large hierarchies
- SAP Note 2513002 available for SP06

**Features**

- New generated test case hierarchy
- Avoids recurring performance-intensive selections of the entire Process Management hierarchy
- Fast hierarchy display on tab Test Case Selection
Application: Assign Testers

- New application for the assignment and replacement of manual testers by Test Coordinator

Features

- Assignment of new testers to Test Package (TPK)
- Replacements of testers from TPK
- Un-assignment of testers
- Mass-upload and assignment of testers for TPK
BPCA SPS 07 delta features
SAP Solution Manager 7.2 SP07 - Test Suite
BPCA: ChaRM Entities

Application: BPCA

• New feature to show dependencies between ChaRM entities for BPCA Analysis

Features

• BPCA supports all ChaRM entities (Change Cycle, ITR, RfC, CD) to derive underlying Transports and Systems
• New feature to display all assignments related to entered ChaRM entity, e.g. Change Cycle or CD
Test Automation SPS 07 delta features
SAP Solution Manager 7.2 SPS 07 - Test Suite
Test Automation: Analysis of Test Execution Logs (1)

Application: Automated Tests - Results

• New application to search and analyze test execution logs for automated tests

Features

• Multi-dimensional search of test execution logs for automated tests. Test tools: CBTA and integrated 3rd party test automation tools
• Overview of all available test logs
• View details of selected test log
Selection and Overview of available test logs

- Selection Parameters
- List of available Logs from SAP and partner test automation tools
SAP Solution Manager 7.2 SP07 - Test Suite
Test Automation: Analysis of Test Execution Logs (3)

Details for selected test execution log

- Status
- Context
- Logs
- Parameters
Test Automation SPS 07 delta features
Component-based Test Automation (CBTA)

- Recording of new test case using CBTA enabled for additional browsers
- Before SP07: only MS Internet Explorer

Available Browsers

- MS Internet Explorer
- MS Edge
- Google Chrome
- Mozilla Firefox
- Supported versions: see documentation and CBTA self check
Analytics SPS 07 delta features
Test Suite Analytics

Application: Traceability Matrix

- New report to show the entire chain from requirements down to test execution and defects

Feature details

- All important entities of the Build process Requirement – to Deploy are shown with interdependencies and status
- Forward navigation to detail applications, e.g. Change and Request Management
- MS Excel download

Benefits

- Roles like Change -, Quality - and Test Managers can analyze all important entities of the requirement to deploy chain
# Test Suite Analytics

**Traceability Matrix: result and included entities**

- Project
- Change Cycle
- Business Requirement
- Process
- Process Step
- IT Requirement
- Request for Change
- Change Document
- Transport
- Test Plan
- Test Case
- Test Execution Status
- Defect
- Defect Status

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<table>
<thead>
<tr>
<th>Project</th>
<th>Project Name</th>
<th>Project…</th>
<th>Change…</th>
<th>Change Cycle…</th>
<th>Business…</th>
<th>Process</th>
<th>Process Step</th>
<th>IT Requirement</th>
<th>IT Requirement description</th>
<th>IT Requirement Status</th>
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<tr>
<td>RK_HEADER</td>
<td>Innovation Project 2019</td>
<td>Released</td>
<td>800004…</td>
<td>Innovation 2019</td>
<td>Order to cash V2 - R</td>
<td>Create Sales Order</td>
<td>8000047579</td>
<td>Change SO Germany 02</td>
<td>Implement</td>
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<td>8000047697</td>
<td>ITR 1 for BR Extend</td>
<td>Implement</td>
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Traceability Matrix

<table>
<thead>
<tr>
<th>Test Case</th>
<th>Test Execution Status</th>
<th>Test Case Execution</th>
<th>Test Case Status</th>
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<tbody>
<tr>
<td>8000047606</td>
<td>In Develop</td>
<td>MWIK…</td>
<td>Released</td>
</tr>
<tr>
<td>8000047606</td>
<td>MWIK…</td>
<td>Chang…</td>
<td>BPCA 1624 WITH TSO CC 800004…</td>
</tr>
</tbody>
</table>
Test Suite Analytics

Access to Traceability Matrix

- SAP Solution Manager Launchpad group Test Suite
Test Suite Analytics

Traceability Matrix: Project as selection parameter
Analytics SPS 07 delta features
Test Suite Analytics

Dashboard with KPIs for manual testing

- Test Suite Dashboard shows KPIs relevant for manual testing

Features

- Tiles, graphs and tables for KPIs
  - Number of active vs. passive testers
  - Test Cases in status error w/o defects
  - Total number of defects resolved
  - Number of test cases performed per tester
  - Number of defects per Test Plan and TPK
  - Number of defects per test case
Test Suite Analytics

Access to KPIs Manual Testing

- SAP Solution Manager Launchpad group Test Suite
SAP Solution Manager – Test Suite
More Information for Customers and Partners
Test Suite – more information for customers and partners

SAP Solution Manager WIKI – Test Suite

- Audience: customers and partners
- Positioning presentations
- How to configure and administration
- Tips and tricks
- Offline demos

SAP Solution Manager Learning Resources Overview

Build up your knowledge and skills

Available Learning Resources
From Interest to Expert Knowledge

- **YouTube**
- **SAP Books**
- **SAP.com**
- **SAP Support Portal**
- **Media Center**
- **SAP Community**
- **SAP Demo Systems**
- **SAP ES Academy**
- **SAP Education**
- **SAP Help Portal**

**Management Competence** (Introduction)
- **Overview Videos**
- **Virtual Roadshow**
- **Overview Publication**
  - SAP Solution Manager for SAP S/4HANA
- **Overview Information**
- **SAP Solution Manager Homepage**
  - (support.sap.com/solutionmanager)
  - Processes, Product, Release, and Support Info
  - Focused Solutions
  - Ready-to-run solutions for SAP Solution Manager

**Core Competence** (Key Value Chains)
- **Expert WIKIs**
- **Technical Documentation**
  - Supported languages, browsers, and databases

**Expert Competence** (Functional Areas)
- **SAP Solution Manager Community**
  - Blogs & Questions
- **System Landscapes**
  - Private Cloud System (CAL), Public Demo System, Internet Demo System
- **Live Expert Sessions & e-Learnings**
  - Get empowered by the SAP Enterprise Support Academy
- **Product Documentation**
  - Application Help, Release Notes, Installation, Upgrade, and Security Guides

**SAP Solution Manager for SAP S/4HANA**

**SAP Solution Manager Media Center**
- Product Videos, System Demos, Tutorials

**SAP Solution Manager Homepage**
- (support.sap.com/solutionmanager)
- Processes, Product, Release, and Support Info
- Focused Solutions
- Ready-to-run solutions for SAP Solution Manager

**SAP Solution Manager Community**
- Blogs & Questions

**System Landscapes**
- Private Cloud System (CAL), Public Demo System, Internet Demo System

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