SAP Solution Manager 7.2 – Test Suite
Test Plan Management

Solution Management, DBS, SAP SE
May 2018
Agenda

SAP Solution Manager 7.2 – Test Suite Overview

SAP Solution Manager 7.2 Test Suite – Test Plan Management

1. Test Plan Management - Overview
2. Test Plan Performance Improvements
3. Steps to create / edit Test Plan
4. BPCA triggered Test Plan generation
5. Tester of type Teams
6. Mass operations for Test Plan and Test Package Management
7. Application: assign Testers
8. SPS 07 entities: Scope, Project, Site
9. Test Suite Analytics

More Information for Customers and Partners
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

Change Impact Analysis
- Test scope estimation before upgrade
  - Scope and Effort Analyzer (SEA)
- Test scope optimization during change events (fix, enhance, innovate, upgrade)
  - Business Process Change Analyzer (BPCA)

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

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></th>
<th>SAP Solution Manager</th>
<th>Micro Focus*</th>
<th>Other vendors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Functional Test Organization</strong></td>
<td>Test Suite</td>
<td>Application Lifecycle Management (ALM)</td>
<td>Tricentis Tosca Testsuite</td>
</tr>
<tr>
<td><strong>Manual Tests</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Analytics and Reporting</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Change Impact Analysis</strong></td>
<td>Scope and Effort Analyzer (SEA) Business Process Change Analyzer (BPCA)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Automated Tests</strong></td>
<td>Component-based Test Automation (CBTA) Test Automation Framework</td>
<td>Unified Functional Testing (UFT)</td>
<td>Worksoft Certify Tricentis Tosca Test Automation</td>
</tr>
<tr>
<td><strong>Mobile Testing</strong></td>
<td></td>
<td>Mobile Center</td>
<td>Perfecto Mobile</td>
</tr>
<tr>
<td><strong>Test Data Provisioning</strong></td>
<td></td>
<td></td>
<td>DeceSoft Test Data (DTD)</td>
</tr>
<tr>
<td><strong>Load and Performance Tests</strong></td>
<td></td>
<td>LoadRunner</td>
<td>Worksoft Performance</td>
</tr>
<tr>
<td><strong>Security Tests</strong></td>
<td></td>
<td>Fortify</td>
<td></td>
</tr>
</tbody>
</table>

**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
Test Plan Management Overview
SAP Solution Manager 7.2 – Test Suite
Test Plan and Test Package Management

Test Plan Management - Purpose
• Compilation of Test Plan with selected test cases for upcoming test cycle

Features
• Test Plan generation: test case selection manually, semi-automatic using attributes and filters or automated via BPCA and SEA
• Multiple Test Packages to define activities for tester groups
• Assignment of manual testers
• Test sequences for business process testing
• Test data assignment
• Analytical Apps for test preparation and test execution
Steps in Test Plan Management

**Test preparation**
- Create Manual and Automated Test Cases
- Assign the Test Cases in Solution Documentation

**Test Plan creation**
- Specify Solution, Branch, Scope and Landscape
- Select Test Cases

**Test Sequence creation (optional)**
- Specify order of Execution

**Test Package creation**
- Break Test Plan into smaller units called Test Packages
- Test Sequences can be consumed in Test packages

**Tester assignment**
- Assign Testers to Test Packages
- Same Test case can be assigned to multiple testers
- It is possible to track Test execution by Tester
What is a Test Plan

- Test Plan is a collection of Test Cases
- Test Plan is specific to a Solution, Branch, Scope
- It is possible to have Manual or Automated Test Cases in a Test Plan
- In case formal Test cases are missing, executables can be used in Test Plan
Lifecycle of a Test Plan

Test in Preparation ➔ Released for Test ➔ Protected ➔ Reopen ➔ Finalized

Supports Digital Signature
What is Test Sequence

Use Case 1

Test Sequence defines the order in which test execution must take place.

Use Case 1: Individual Test cases in a Sequence

Test sequence specifies the order of Test Cases. Manual and Automated Test cases can be combined in the same Test sequence.
What is Test Sequence

Use Case 2

Test Sequence defines the order in which test execution must take place.

*Use Case 2: One E2E document describing the flow. Test sequence is composed of Executables*
Test Plan Management Performance Improvements
Test Plan Management

Performance Improvements

Test Plan Performance

- Performance of test case selection during Test Plan creation depends on
  - volume of available test cases
  - number of nodes in Solution Documentation
- Performance can be improved by selecting a View (up to SPS 06) or Scope (SPS 07) with lower number of nodes and test cases

Test Plan Performance Improvements

- Additional performance improvement available with SPS 07 through generation of Test Case Hierarchy within Test Plan Management
- Advantage: generated structure and content information can be reused during Test Plan editing and prevents reading of large amount of data
- Performance improvement available for SPS 06 via SAP Note 2513002

TP Performance improvements

1. Views or Scope
2. Test Case Hierarchy
Test Plan creation **Step by Step**
Test Plan Management
Creation of Test Plan, Test Packages and Tester Assignments

Solution Documentation

Solution
→ Business Process
  → Sales Scenarios
    → Order to Cash
      → Create Sales Order
      → Create Delivery
      → Create Billing
    → Rush Order
      → Procurement Scenarios
        → Standard Procurement
          → Create Purchase Req
          → Create Purchase Order
    → Process Step Library
    → Executable Library

Test Plan

Solution
→ Business Process
  → Sales Scenarios
    → Order to Cash
      → Create Sales Order
      → Create Delivery
      → Create Billing
  → Procurement Scenarios
    → Standard Procurement
      → Create Purchase Req
      → Create Purchase Order

Test Packages

Solution
→ Business Process
  → Sales Scenarios
    → Order to Cash
      → Create Sales Order
      → Create Delivery
      → Create Billing
  → Procurement Scenarios
    → Standard Procurement
      → Create Purchase Req
      → Create Purchase Order

Tester Assignment
Test Plan Management
Create or Edit Test Plan

Select or create Test Plan

- Tile: Test Plan Management
- List of available Test Plans and Release Status
- List can be personalized
- Filter available via button Show Quick Criteria Maintenance

Tips

- Define Scopes* before creating a Test Plan
- Use tile Personalization to enter your individual default values

*SAP Solution Manager 7.2 SP07
Test Plan Management
Create or Edit Test Plan

Tab 1: General Data

- Mandatory: Title, Responsible, Solution, Branch, Scope*, System Role
- Optional: Project*
- Required action: generate Test Case Hierarchy*
- Display only: section System Landscape shows all involved SAP systems

Tips

- Select a Scope* that only includes the nodes and test cases that are needed for the test activities. This improves the performance significantly
Test Plan Management
Create or Edit Test Plan

Tab 2: Settings

Mandatory:

- **Release Schema** – controls when test activities can start and whether changes to test scope are allowed during test execution
- **Executables in Test Case selection**: defines whether only test cases can be selected or Executables as well
- **Test Classification** – purpose of the Test Plan
- **Planned start and end date** – very important information mainly used in Test Suite Analytics
- **Document Type for Test Note / Test Results** when using manual tests of type Test Document
Test Plan Management
Create or Edit Test Plan

Tab 3: Test Case Selection

- Hierarchy of Solution Documentation nodes and assigned Test Cases and Executables
- Advanced filter options via Apply Filters

Tips

- Create or Edit mode required to expand hierarchy and test case or executable selection
- Scope* defines which parts of the hierarchy are displayed

*SAP Solution Manager 7.2 SP07
Tab 4: Test Sequences

- **Definition**: sequence of test cases or executables which have to be executed in a certain order with selected testers with know-how in these areas
- **Type 1**: multiple test cases / executables in a defined order
- **Type 2**: one E2E test case that describe the entire test flow plus multiple executables
- Test Sequence is defined at Test Plan level and can be used to easily generate Test Packages
- Test Sequence can include manual and automated test cases
**Test Plan Management**

Create or Edit Test Plan

**Tab 5: Test Packages**

- Test Packages are sub-sets of test cases for the entire Test Plan
- Individual Testers or Test Teams (both of type Business Partner) are assigned to Test Packages
- Mass creation of empty Test Packages available to speed-up the Test Package creation process
Test Plan Management
Create or Edit Test Plan

Tab 6: Test Data Sets
Assign Test Data Sets to Test Plan and/or Test Packages

Feature Details
Customers can use existing Test Data Containers (TDC) and assign them as Test Data sets in Test Plan or Test Package.

Test Data sets assigned to Test Plan can be assigned to multiple Test Packages.

Benefits
Once assigned, Test data set is available during Test execution and can be launched by manual Testers
Test Plan Management

BPCA generated Test Plans
Test Plan Management
Automated Test Scope identification and Test Plan generation with BPCA

Test Scope Identification
• BPCA identifies impacted process nodes and executables from software change events
• Examples: configuration changes, custom code implementation, SP deployments, S/4HANA Release upgrades
• BPCA can calculate a risk-based test scope to significantly reduce the test effort

Automated Test Plan generation
• BPCA can automatically generate a regression test plan
Test Plan Management Test Teams
SAP Solution Manager 7.2 Test Suite – SP05 Delta Functionality

Tester of type Team

Team assignment
Assign Business Partner Organization or Group as Tester

Feature Details
Business Partner type Organization and Group Supported as Testers
Two new relationship categories to handle tester assignments.
  • Has the Testers (FTST001)
  • Is Tester for (TTST001)

Benefits
Test Coordinator can create relationships and manage Test teams rather than individual testers
Test Plan Management Mass Operations
SAP Solution Manager 7.2 Test Suite – SP06 Delta Functionality
Test Plan Management: mass maintenance of attributes

Mass maintenance of Test Plan and Test Package attributes (1)
• List based editing of attributes

Feature details
• Edit attributes of multiple Test Plans / Test Packages in one window

Benefits
• Fast and easy maintenance of attributes for multiple Test Plans and Test Packages
Mass maintenance of Test Plan and Test Package attributes (2)

Navigation within Test Plan Management – for Test Plans

Select 1-n Test Plans
Mass maintenance of Test Plan and Test Package attributes (3)

Navigation within Test Plan Management – for Test Packages

Select 1-n Test Packages

Mass Maintenance of Test Packages Attributes

Test Plan ID: FIT O2C SALES ORDER CREATION
Test Plan Description: FIT TP O2C Sales Order Creation

<table>
<thead>
<tr>
<th>Test Package ID</th>
<th>Description</th>
<th>Person Responsible</th>
<th>Priority</th>
<th>Planned Start Date</th>
<th>Planned End Date</th>
<th>Actual Start Date</th>
<th>Actual End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>TPK 1 O2C</td>
<td>TPK 1 O2C</td>
<td>John Smith</td>
<td>High</td>
<td>01.08.2017</td>
<td>31.06.2017</td>
<td>00.00.0000</td>
<td>00.00.0000</td>
</tr>
<tr>
<td>TPK 2 O2C</td>
<td>TPK 2 O2C</td>
<td>John Smith</td>
<td>High</td>
<td>01.08.2017</td>
<td>31.06.2017</td>
<td>00.00.0000</td>
<td>00.00.0000</td>
</tr>
</tbody>
</table>
SAP Solution Manager 7.2 Test Suite – SP06 Delta Functionality
Test Plan Management: mass copy (open Test Cases)

Test Plan - mass copy (open Test Cases)
• Additional copy option for test cases

Feature details
• Select test cases that are not successfully tested yet or are part of a sequence to create new test plans

Benefits
• More Flexibility
• Easier creation of test plans including test cases that need to be tested
SAP Solution Manager 7.2 Test Suite – SP06 Delta Functionality
Test Plan Management – Mass Creation of Test Packages

Mass creation of Test Packages
- List based creation of Test Packages

Feature details
- Create multiple Test Packages at once (without test case and tester assignment)
- Generated IDs and descriptions based on Test Plan ID

Benefits
- Easy creation of Test Packages
Mass Creation of Test Packages: navigation within Test Plan Management

Test Plan Management – Mass Creation of Test Packages:

- **Test Package List**: Test Package ID, Description, Person Responsible, Priority, Planned Start Date, Planned End Date.
- **Test Sequence List**: Priority, Locked, Test Cases.
- **Mass Create** option available for creating multiple test packages at once.
SAP Solution Manager 7.2 Test Suite – SP06 Delta Functionality
Test Plan Management: Usability for Test Packages and Test Sequences

**Improved usability of Test Package List and Test Sequence List**

- Adding of functions and a new column

**Feature details**

- Activation of filter and sorting capability
- Number of test cases now visible in Test Package List

**Benefits**

- Easier to use

<table>
<thead>
<tr>
<th>Test Package List</th>
<th>Test Sequence List</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Test Package List Table" /></td>
<td><img src="image" alt="Test Sequence List Table" /></td>
</tr>
</tbody>
</table>

- **TPK 1 O2C**
  - Description: TPK 1 O2C
  - Priority: High
  - Locked: No
  - Test Cases: 1

- **TPK 2 O2C**
  - Description: TPK 2 O2C
  - Priority: High
  - Locked: No
  - Test Cases: 1

© 2018 SAP SE or an SAP affiliate company. All rights reserved. | PUBLIC
Test Plan Management: new with SPS 07
Scope, Project, Site
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
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>
</tr>
</thead>
<tbody>
<tr>
<td>Global</td>
<td>D1/100</td>
<td></td>
<td></td>
<td></td>
</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>
<td></td>
</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:
Application: Assign Testers
**New 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
Test Plan Management:
Test Suite Analytics
Test Suite Analytics
Classification of Test Suite Analytics

Overview

Test Execution Analytics and Progress Analytics

Completeness and Gap Reports

Test Management Dashboard
Test Suite Analytics
Data Flow for analytical Applications

SAP BO Design Studio

SAP Analytics Cloud (SAC)

Test Suite Dashboard (Focused Build)

Progress Analytics

Standard BEx Queries

Test Suite BW MultiProvider

Gap and Completeness Reports

Test Execution Analytics

Standard Data Extractor

Test Suite tables

SAP Solution Manager 7.2 Test Suite
Test Suite Analytics
Tile: Overview

User roles involved in Test Management can get a quick overview about test preparation and test execution activities

<table>
<thead>
<tr>
<th>Role:</th>
<th>Test Manager</th>
<th>Tester</th>
<th>Change Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test execution status for all open Test Plans</td>
<td>Test Packages assigned to me</td>
<td>Information about software changes differentiated by system, date intervall and change type, e.g. Transport, SP</td>
<td></td>
</tr>
<tr>
<td>planned start / end dates</td>
<td>planned start / end dates</td>
<td></td>
<td>Info which changes have been analyzed by BPCA</td>
</tr>
<tr>
<td>open test cases and defects by Test Package</td>
<td>Test Case assigned to me and my colleagues incl.status</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Overview for Test Managers and Test Coordinators

- Which Test Plans are ready for execution?
- What is the test execution status by Test Plan and Test Packages?
- How many open Defects exists?
Overview for Testers

- Which Test Packages are assigned to me?
- What are planned start and end dates?
- Test Cases assigned to me and my colleagues including status
## Test Suite Analytics
### Completeness and Gap Reports

<table>
<thead>
<tr>
<th>Completeness and Gap Reports</th>
<th>Scope and purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>TBOM and Test Cases by Executables</td>
<td>Check availability of TBOMs and Test Cases for Executables of the Executable Library</td>
</tr>
<tr>
<td>Test Case assignment to Solution Documentation</td>
<td>Hierarchical Report: Check availability of Test Cases for Executables, Process Steps and Business Processes</td>
</tr>
<tr>
<td>Test Cases</td>
<td>Shows list of available Test Cases</td>
</tr>
<tr>
<td>Test Plans – Node and Test Case Changes</td>
<td>Identifies Test Plans affected by changes in Solution Documentation, Test Case versions and test data for automated tests</td>
</tr>
</tbody>
</table>
| Test Case not included in Test Plan              | Purpose 1: identify Test Cases not included in Test Plans  
Purpose 2: identify Test Cases assigned to Test Plans, but no Test Package                                                                          |
Test Suite Analytics
Completeness and Gap Reports

TBOMs and Test Cases by Executables

- **Purpose:** Check availability of TBOMs and Test Cases for Executables of the Executable Library
- **Access via SAP Solution Manager Launchpad**
  - tile Test Suite - Test Preparation or
  - tile Test Suite - Analytics
- **Select Solution and Branch and launch the report**
- **Report breadcrumb navigation:** check the selected area of Solution Documentation.
  - Tip: you may have to select the “Browser” view, select the correct section “Executable Library” and then go back to “List” view
Filters can be used for fine-granular selection, e.g. TBOM types or node attributes
Test Suite Analytics
Completeness and Gap Reports

Test Case Assignment to Solution Documentation

- **Purpose:** check availability of Test Cases for Executables, Process Steps and Business Processes
- **Hierarchical display of nodes with assigned test cases**
- **Filter options to show nodes without test cases**
- **Columns showing important attributes, e.g. Assignment Type, Prio, Responsible**
- **Forward navigation to test case**
Test Suite Analytics
Completeness and Gap Reports

Test Cases

• Purpose: shows list of available Test Cases
• Additional information by test case, such as Test Case Type, Test Case Classification
• Rich filter functions
• Forward navigation to test case and process node
Test Suite Analytics
Completeness and Gap Reports

Test Plans – Node and Test Case Changes

- **Purpose**: Identifies Test Plans affected by changes in Solution Documentation, Test Case versions and test data for automated tests
  - **Changes**
    - Structure change
    - Document change
    - Test Config Variant change
  - **Forward navigation**
    - Test Package Analysis
    - Test Case Analysis
    - Defect Analysis
Test Suite Analytics
Completeness and Gap Reports

Test Cases not included in Test Plans

- **Purpose 1:** identify Test Cases not included in Test Plans
- **Purpose 2:** identify Test Cases assigned to Test Plans, but no Test Package

<table>
<thead>
<tr>
<th>Solution</th>
<th>Test Case ID</th>
<th>Missing in</th>
<th>Responsible</th>
<th>Created On</th>
<th>Created At</th>
<th>Changed On</th>
<th>Changed At</th>
</tr>
</thead>
<tbody>
<tr>
<td>Libraries</td>
<td>2_CREATE_CUSTOMER_PROJECT</td>
<td>Missing in Test Package</td>
<td>Bimal Kumar</td>
<td>2016-04-05</td>
<td>08:30:06</td>
<td>2016-04-06</td>
<td>08:34:42</td>
</tr>
<tr>
<td>Process Step Library</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solution Manager</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer Project Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create Customer Project</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Executeable Library</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAP ERP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD-SLS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create Sales Order</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create Sales Order - VAW1 Generic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD-BIL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create Billing Document</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create Billing Document - VF01 Generic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MM/PPR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MM/PR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MM/IV</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Test Suite Analytics

**Test Execution Analytics**

<table>
<thead>
<tr>
<th>Test Execution Analytics</th>
<th>New with</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Multiple Test Plan Status</td>
<td></td>
</tr>
<tr>
<td>2 Multiple Test Plan Status Details</td>
<td>SPS 06</td>
</tr>
<tr>
<td>3 Test Plan – Test Package Analysis</td>
<td></td>
</tr>
<tr>
<td>4 Test Plan – Test Case Analysis</td>
<td></td>
</tr>
<tr>
<td>5 Test Package – Test Case Analysis</td>
<td></td>
</tr>
<tr>
<td>6 Test Plan – Defect Analysis</td>
<td></td>
</tr>
<tr>
<td>7 Test Package – Defect Analysis</td>
<td></td>
</tr>
<tr>
<td>8 Test Report</td>
<td></td>
</tr>
<tr>
<td>9 Traceability Matrix</td>
<td>SPS 07</td>
</tr>
</tbody>
</table>
Test Suite Analytics
Test Execution Analytics

Multiple Test Plan Status Overview

- Status overview for multiple Test Plans
- Status for Test Cases and Defects
- High number of columns – with user personalization
- Drilldown to related analytics for selected test plan
  - Test Plan – Defect Analysis
  - Test Plan – Test Case Analysis
  - Test Plan – Test Package Analysis
Test Suite Analytics

Multiple Test Plan Status Details

- Analysis of multiple test plans with status details

Feature details

- Analysis for multiple test plans including Test Packages, Tester, test status, defects, etc.

Benefits

- Comprehensive status analysis for Test Coordinators
Test Suite Analytics
Test Execution Analytics

Test Plan – Test Package Analysis

- Status for 1 Test Plan and assigned Test Packages
- Status and statistics for each Test Package
- High number of columns – with user personalization
- Drilldown to related analytics for selected test plan
  - Test Case Analysis
  - Defect Analysis
## Test Suite Analytics
### Test Execution Analytics

### Test Plan – Test Case Analysis

- **Status** for 1 Test Plan with hierarchy and assigned test cases
- **Status and statistics** for each Test Case and Defects
- **High number of columns** – with user personalization
- **Drilldown** to related analytics for selected test plan
  - Test Package Analysis
  - Defect Analysis

---

### Test Plan - Test Case Analysis

<table>
<thead>
<tr>
<th>Test Plan</th>
<th>Not Assigned (%)</th>
<th>Not Passed (%)</th>
<th>In Progress (%)</th>
<th>Done (%)</th>
<th>OK (%)</th>
<th>Last Status Date</th>
<th>Status</th>
<th>Test Case Classification</th>
<th>Priority</th>
<th>Open Defects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Plan</td>
<td>44.44</td>
<td>0.00</td>
<td>0.00</td>
<td>33.33</td>
<td>22.22</td>
<td>2018-05-10 15:49:34</td>
<td>Open</td>
<td>Functional Test</td>
<td>High</td>
<td>1</td>
</tr>
</tbody>
</table>
Test Suite Analytics
Test Execution Analytics

Test Plan – Defect Analysis

- List of Defects for multiple Test Plans
- Many selection parameters to influence suitable analysis
- Multiple columns – with user personalization
- Drilldown to related analytics for selected test plan
  - Test Case Analysis
  - Test Package Analysis
Test Suite Analytics
Test Execution Analytics

Test Report

- Purpose: Summary of test results in generated MS Word format with chapter structure
- Many selection parameters to influence output, e.g.
  - Test Plan details
  - Test Packages status
  - Solution Documentation
  - System Landscape
  - Defects, …
Test Suite Analytics
Test Execution Analytics

Traceability Matrix

- **Purpose:** report to show the entire chain from requirements, change documents, … to test case status and defects
- **Benefits:** roles like Test Manager, Q-Manager and Change Manager get full transparency about development, test and correction status
- **Availability:** SAP Solution Manager 7.2 SPS 07
Test Suite Analytics

Traceability Matrix: available columns

- 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
## Test Suite Analytics
Status and Progress Analytics (BW based)

<table>
<thead>
<tr>
<th>Status and Progress Analytics</th>
<th>New with</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 KPIs for Manual Testing</td>
<td>SPS 06 plus SPS 07 extensions</td>
</tr>
<tr>
<td>2 Test Plan – Status Analytics</td>
<td></td>
</tr>
<tr>
<td>3 Test Package – Status Analytics</td>
<td></td>
</tr>
<tr>
<td>4 Test Case – Status Analytics</td>
<td></td>
</tr>
<tr>
<td>5 Progress Analytics</td>
<td></td>
</tr>
<tr>
<td>6 Defect Analytics - Status</td>
<td></td>
</tr>
<tr>
<td>7 Defect Analytics - Progress</td>
<td></td>
</tr>
<tr>
<td>8 Defect Analytics - Operation</td>
<td></td>
</tr>
<tr>
<td>9 Test Effort Analytics</td>
<td></td>
</tr>
<tr>
<td>10 Test Effort Over Time</td>
<td></td>
</tr>
</tbody>
</table>
Test Suite Analytics
Status and Progress Analytics (BW-based)

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
Status and Progress Analytics (BW-based)

Dashboard with KPIs for manual

- Drilldown for KPI: Number of active / passive testers
Test Suite Analytics
Status and Progress Analytics (BW-based)

Dashboard with KPIs for manual

- Drilldown for KPI: Number of active / passive testers → View: Detailed View → shows names of involved testers
Test Suite Analytics
Status and Progress Analytics (BW-based)

Layout of Progress Reports

1. **Selection**
   - Selection parameters
   - Saved Selections
   - Save Selection As

2. **Graphic**

3. **Grid**
   - Filter
   - Sort
   - …

4. **Drill-down**
   - Selection of available fields for drill-down
   - Assignment of field to rows or columns
Test Suite Analytics
Status and Progress Analytics (BW-based)

Test Plan – Status Analytics

- Multiple Test Plans for selected dimensions like Solution, Branch, Test Plans, Owners, Release Status, …
- Result: Test Plan execution status with percentage of completion
- Result: Number of Test Cases per Test Plan in aggregated test execution status
- Drilldown by many dimensions
Test Suite Analytics
Status and Progress Analytics (BW-based)

Defect Analytics - Status

- Multiple Test Plans for selected dimensions like Solution, Branch, Test Plans, Owners, Release Status, …
- Result: Number of Defects by Test Plan with status information
- Drilldown by many dimensions
Test Suite Analytics
Status and Progress Analytics (BW-based)

Progress Analytics

- Multiple Test Plans for selected dimensions like Solution, Branch, Test Plans, Owners, Release Status, …and time intervall
- Result: Time series of number of Test Cases per Test Plan in aggregated test execution status
- Drilldown by many dimensions
Test Suite Analytics
Status and Progress Analytics (BW-based)

Test Case - Status Analytics

- Report: Test Case – Status Analytics with additional details about test execution status

Feature details

- Test Execution Status for test cases

Benefits

- Efficient test execution analysis for Test Coordinator
Test Suite Analytics
Status and Progress Analytics (BW-based)

Defect Analytics - Status
- Report: Progress Analytics with additional details about Test Defects

Feature details
- Drilldown capability to Defect including Defect ID and Description

Benefits
- Efficient test execution analysis for Test Coordinator
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

<table>
<thead>
<tr>
<th>Management Competence (Introduction)</th>
<th>Overview Videos</th>
<th>Overview Publication</th>
<th>Overview Information</th>
<th>SAP Solution Manager Homepage (support.sap.com/solutionmanager)</th>
<th>SAP Solution Manager Media Center</th>
<th>Product Videos, System Demos, Tutorials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Competence (Key Value Chains)</td>
<td>Expert Publication</td>
<td>Monitoring and Operations with SAP Solution Manager</td>
<td>Technical Documentation</td>
<td>Supported languages, browsers, and databases</td>
<td>SAP Solution Manager Community</td>
<td>Blogs &amp; Questions</td>
</tr>
</tbody>
</table>

- 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

- Classroom Trainings
  - Setup, configuration, and functional overview

- Product Documentation
  - Application Help, Release Notes, Installation, Upgrade, and Security Guides

© 2018 SAP SE or an SAP affiliate company. All rights reserved. | PUBLIC
Thank you.