Test Management and Deployment Management in SAP Cloud ALM

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Agenda

- Introduction
- Change and Deployment Management in SAP Cloud ALM
- Test Management in SAP Cloud ALM
- Q&A
SAP Cloud ALM

A brand new, cloud-based ALM offering.

For the Intelligent Enterprise
- for cloud-centric customers
- manages cloud and hybrid solutions
- supports every SAP solution

In the public cloud
- re-thought, newly designed, and built on modern cloud technology
- starts with trial and is for life
- ready for immediate consumption
- is cost-efficient for customers

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SAP Cloud ALM

Product description

Key capabilities

Implementation:
- Consume best practice content from SAP Activate
- Perform fit-to-standard workshops
- Manage implementation and extensions
- Execute integration and acceptance tests
- Orchestrate consistent deployment to production

Operations:
- Detect and manage business exceptions
- Identify and analyze performance critical situations
- Structure and automate operation activities
- Provide transparency regarding integration issues
- Monitor and optimize business processes

Service:
- Access service reports and navigate to recommendations
- Enable automated service applications in your private environment
- Create and execute your own self-services
- Request SAP services, track and implement recommendations

SAP Cloud ALM will support the entire lifecycle of the Intelligent Enterprise.

Implementation: Demand → Build → Test → Deploy

Operations: Monitor → Diagnose → Correct → Optimize

Service: Engagement → Delivery automation → Collaboration

Platform services and data management

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SAP Cloud ALM for Implementation

Harmonized, Content-Driven Implementation of the Cloud-based, Intelligent Enterprise Suite. From Onboarding to innovation adoption.

**Onboard**
- Consume best practice content and perform Fit-to-Standard Workshops

**Demand**

**Build**
- Perform configuration activities and manage extensions

**Test**
- Manage integration and acceptance tests

**Deploy**
- Orchestrate consistent deployment to production

**Innovate**
- Consume quarterly updates and ensure adoption

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What is the SAP Cloud ALM Roadmap?

SAP makes SAP Cloud ALM available step-by-step.

SAP Cloud ALM starts with the implementation portal for SAP S/4HANA Cloud.

We will extend the scope to complete lifecycle coverage.

We will extend coverage of SAP products to all SAP solutions.

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Change & Deployment Management in SAP Cloud ALM
Change Management

Every change should deliver **business value**; the **change management processes** should be geared towards enabling that delivery.

The Change management process is responsible for controlling the Lifecycle of all Changes. The primary objective of Change Management is to **enable beneficial changes** to be made, with minimum disruption to IT Services.

ITIL Service Transition, AXELOS, 2011, page 229

https://www.uh.edu/infotech/services/cmc/
Change Management for Software-as-a-Service

Building and running applications and services in the cloud changes roles and responsibilities for many people across many different teams.

There should be a balance between Control and Agility, with frequent cloud releases, the implementation of rigid and manual controls to protect the company from the risk of security threats and vulnerabilities must be reevaluated.

Speed of Delivery: The mindset change from deploying large monolithic applications only a few times a year to deploying small services weekly or biweekly, changes the implementation and operating model.

Implementation Projects as well as operations activities need to follow the Upgrade Schedule of the Cloud Provider, upgrade and downtimes can no longer be planned individually.

https://www.cloudtp.com/doppler/six-reasons-cloud-strategy-must-include-plan-change/
SAP Cloud ALM
Change & Deployment Management Objectives

Change Process:

- **Harmonizes** the experience of diverse customers’ change scenarios
- Makes software changes and their deployment **easy, compliant and convenient**

Deployment Integration:

- **Orchestrates** heterogeneous Transport Mechanisms and make Upgrades and Changes a **Non-Event**
- Delivers **tight integration** into SAP solutions

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Planned Capabilities for the Change Process

**Plan Transports**

SAP Cloud ALM for Implementation indicates if the project timeline is affected by SAP upgrades or maintenance windows. The **Deployment Manager** schedules the transports accordingly, usually at the end of each sprint.

Result: Deployment plan available for each Project Member

**Specify Requirement Details**

As soon as Solution Validation is completed and requirements are collected, **Carl Configurator** analyzes the individual requirements and evaluates their feasibility, impact and effort.

Result: List of feasible Requirements incl. impact and rough effort estimation

**Prioritize Requirements**

**Charlie Change Manager** prioritizes Requirements.

Result: The list of Requirements with effort estimation and prioritization

**Approve Requirements for Realization**

Requirements are approved by **Charlie Change Manager** based on advice of Change Advisory Board (CAB).

Result: List of selected requirements incl. effort estimation, prioritization and approval.

**Approve and deploy Requirements for Go-Live**

Implemented and tested requirements are approved for go-live by **Charlie Change Manager** based on implementation status, test results and business need. If necessary, default scheduled deployment date is adjusted.

Result: Successful deployment of approved requirements/processes

**Monitor Change Management**

**Charlie Change Manager** monitors the progress of requirements and the technical deployment regularly to reduce the impact on the productive environment.

Result: Revised deploy scope and change audit trail for the current project

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Planned Capabilities for the Deployment Integration

The Change & Deployment Management supports Customers’ Change Scenarios and their orchestration:

<table>
<thead>
<tr>
<th>Change Scenario Examples</th>
<th>Transport Mechanism Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Business Configuration</td>
<td>Q2P</td>
</tr>
<tr>
<td>Finetuning (e.g. via SSCUIs)</td>
<td>Q2P</td>
</tr>
<tr>
<td>In-App Extensions, Workflows, Reports, Form, Interface</td>
<td>Adaption Transport Organizer (ATO)</td>
</tr>
<tr>
<td>Side-by-Side Extension with SAP Cloud Platform</td>
<td>Transport Service Cloud</td>
</tr>
<tr>
<td>Scope Extension (e.g. New Country, Scope Item)</td>
<td>Q2P, etc.</td>
</tr>
<tr>
<td>SFSF Configuration</td>
<td>Instance Sync</td>
</tr>
<tr>
<td>Additional Private &amp; Public Cloud Applications</td>
<td>tbd</td>
</tr>
</tbody>
</table>

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Planned Functionality Mock-Ups
Quarterly Release Upgrade Support

- Plan Project Milestones based on SAP Release Data
- Get recommendation for deployment windows
- Access to tenant upgrade dates
- Access to release information like ‘What’s New’ or ‘Release Impact Assessment’
- Overview of all upgrade-related tasks

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Lab Preview
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Planned Functionality Mock-Ups
Approval for Realization

- Select a subset of Requirements (e.g. those approved by Change Advisory Board)
- Approve a selection or single Requirements for Realization
- In one click also generate tasks for Realize phase

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Planned Functionality Mock-Ups
Approval for Deployment

- Confirm Requirements (for Deployment)
- Based on realization and testing results
- As soon as deployment can be triggered via SAP Cloud ALM, Confirmation can be rephrased in Approval

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Planned Functionality Mock-Ups
Requirements Reporting

- Implementation Overview
- Links to detailed UIs for:
  - Requirements,
  - Tasks,
  - Test Preparation,
  - Test Execution,
  - Approval for Deployment
Test Management in SAP Cloud ALM
The “Delivery Pace” Race

- Major On-Premise Releases or Waterfall Projects: 1-2 years
- Agile On-Premise Projects: 6 months
- S/4 Cloud Releases or DevOps Agile Projects: 3 months
- SAP Analytics Cloud: Daily
The Customers Challenge

The customers want:

- Innovation
- Quick Business Value
- Market Advantage

The customers still need:

- Controlled Costs
- High Quality
- Confidence in SAP to help them

SAP Cloud ALM for Implementation

- Demand
- Build
- Test
- Deploy
SAP Cloud ALM Test Management

Capabilities

Project and Process Integration

The testing scope is automatically derived from the Project scope. Tight integration with the Process Management to leverage the business processes and the business content.

Automation Providers Integration

By integrating SAP own automation providers together with the best of breed cloud based automation providers we maximize our automation capabilities. This is critical moving into the cloud world and for integration testing.

Support Manual Testing

Manual testing will still be needed in the cloud. There will still be user acceptance tests. By providing an integrated solution relying on the business process content delivered by our products, we ease manual test creation and execution.

Monitor Execution

We always provide an accurate view on the current test status (for manual and automated test cases). Allowing us to make the right decisions for our projects in terms of quality and deployment.

Signoff Test Status

Signoff the current test status. Validate all test activities. Prepare compliance reports.

Change & Deployment Management Integration

Direct integration into change and deployment management to provide increased visibility on the current quality and also to enable our customers for Continuous Deliveries. Full traceability of requirements from test preparation, into test execution and finally deployment.

Orchestration and Integration

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SAP Cloud ALM Test Management

Objectives and Capabilities

Test Management
- Scoping
- Manual Functional Testing
- Automated Functional Testing
- Requirement Traceability

Integration of Cloud-Based Automation providers
- To offer our customers the capability of leveraging different vendors and technologies

Easy to consume solution.
- Open to support all products in the future:
  - Cloud and On-Premise
  - SAP and non SAP

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SAP Cloud ALM Test Management – Test Overview
2020 Planned Functionality Mock-Ups

- New Fiori 3.0 design based on cards
- Complete Overview in a glimpse
- Test Preparation
- Requirement Coverage
- Test Execution
- And more to come…

Test

Test Preparation
By Test Cases

Test Readiness
By Processes

Test Coverage
By Requirements

Test Execution

 Prepared | In Preparation
15 | 30

15

30

40

Error | Not Started | In Process | OK
3 | 15 | 25 | 45

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Prepare your test cases:

- Per Business Processes
- Based on Requirements
- Manual or Automated

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Requirement coverage overview:

- Are all the requirements covered by test cases?
- Do we have any gaps or overlaps?
- Assignment and Creation capabilities.
From Best Practice content to Test Case in a few clicks!

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Test execution overview:

- Per process
- Per test case
- With execution history

SAP Cloud ALM Test Management – Test Execution
2020 Planned Functionality Mock-Ups

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SAP Cloud ALM Test Management

Planned Key Capabilities

Testing of Integration Scenarios (between S/4 and SuccessFactors for instance)

- Composition of automated test cases

Targeted Testing based on:

- Project scope
- Real solution usage
- Release information

Integration in continuous delivery pipelines for automatic test execution

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Targeted Testing – Concepts

SAP Cloud ALM

Demand  Build  Test  Deploy

Project Scope

Mission Critical Test Scope

Release Information

Release Scope

Usage Data

Production Customer Tenants

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Where to go for more Information?

SAP Cloud ALM Offers Customers of Cloud Solutions from SAP Tailored Application Lifecycle Management


SAP Support Portal Home / Application Lifecycle Management

Why ALM for Cloud? What is SAP Cloud ALM?


Application Lifecycle Management in the Cloud: As SAP Moves Forward, Microsoft Drops the Ball.


https://www.youtube.com/watch?v=yMGY2cUWk10&list=PLFrwZZeBUlfJyWpJ2nmokXOFsue_Z7sQ&index=1

Moving to the Cloud? Don’t Forget Application Lifecycle Management


Questions?
Thank you.

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