Overview – Change & Release Management
(Change Request Management)
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Agenda

- Building a bridge between today’s environment and tomorrow’s technology

Overview: Change Request Management
SAP Solution Manager

Product description

**Business Continuity**
- Enhancement
- Service request
  - Minor release
  - Urgent change
- Request for change

**Time to Market**
- Incident
- Problem

**Efficiency**
- Business requirements
- Portfolio
- Project

**Compliance**
- Major release

IT service management
Run SAP like a factory

Business process monitoring and analytics
Monitoring of systems, technical scenarios and end user experience

IT portfolio & project management
Build SAP like a factory

Change
- Design mgmt.
- Build mgmt.
- Test mgmt.
- Release & deployment mgmt.

Build execution
Test execution
Deployment execution
Building a bridge between today’s environment and tomorrow’s technology

"Change is the law of life and those who look only to the past or present are certain to miss the future."  John F. Kennedy
Building the Bridge –
Take advantage of new technology while leveraging existing investments.

Digital Applications | Experimental | Innovation | Agile | High Pace

Enterprise Applications | Critical Business Process Engine | Tightly Governed | Moderate Pace

SAP Leonardo

Business Transactions | Intelligent Insights
Challenges for Change & Release Management

Hybrid architectures entail the risk, that IT loses the ability to govern its environment.

Expectation to get products faster to the market and drive growth much higher - even as they reduce costs through increased efficiencies.

IT will invest less in developing specialists and more in becoming brokers of IT services. Nevertheless Change Management needs to be under control.

Change Management in Hybrid environments needs to fulfill audit requirements like in on premise.
Challenges for Change & Release Management

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Change Control Management
Overview
Change Control Management
Overview

- Release Management
- Change Request Management
- Quality Gate Management
- Central Transport Management
- Change and Transport system (SAP / Non SAP)
- Transport Analytics / Change Diagnostics
Change Request Management

Overview and Insights into “Change Request Management” as part of SAP Solution Manager
SAP Solution Manager verified for ITIL® Service Lifecycle

- SAP Solution Manager is external verified to support processes in all ITIL Service lifecycle phases
- Currently SAP Solution Manager is the only IT Management tool in the market that owns the ITIL v2011 edition certificate for all 15 processes that can be certified
- Management of IT services according to ITIL is integrated in the scenarios of Build-and Run SAP like a factory
- The core ITIL best practice processes are delivered out of the box in SAP Solution Manager
System Landscape for End-to-End Integrated Service Management
SAP Solution Manager as the central IT integration platform

SAP ERP*
Financial Management

IT Service Management
- Incident Management
- Request Fulfillment
- Release & Deployment Management
- Capacity Management
- Availability Management
- Service Catalog Management
- Problem Management
- Change Management
- Service Level Management
- Service Portfolio Management
- Event Management
- IT Service Continuity Mgmt.

*S = separate license required
Challenges for Change & Release Management

Growing **complexity of IT infrastructure** leads to issues with changes in organization

Many **general issues with Changes** and their implementation in the company

**Organizational challenges** with existing Change Management processes
Key Benefits with Change Request Management

1. Best-Practice Processes
2. Risk Minimization
3. Integration in technical Tools
4. Better traceability of Changes
5. Easy Adoption and highly customizable
1 Best-Practice Processes
Separate Requests from Change Implementation & Deployment

**Process Layer:** Change & Release Management Process

1. **Request for Change**
2. **Change Document**
3. **Change Cycle**
Control impact: bundle changes for a joint-deployment

Change Request Management supports **Release Management** process – for better change deployment control and risk mitigation.

Individual request and implementation of Changes  
Release compilation via Change Cycle  
Joint Deployment
Maximize flexibility with Continual Deployment Model

Possibility to manage **Independent Changes** if Phase Control or Release Management is not applicable for organization or IT

Individual request and implementation of Changes  \[\rightarrow\]  Individual Deployment
Two-Speed IT - Pick your Change & Release Management Strategy!

**Continual Deployment**

- Development and Imports may happen either individually or bundled (on demand / daily / weekly).
- **However:**
  - No phases, no gates! Every single change can be handled independently — full flexibility.

**Phase Driven Deployment**

- All changes and transports of a cycle shall be imported together (Project - Import All).
- Mostly relevant for Project or Wave based transport- and change management.
- Additional flexibility options for preliminary or “no risk” changes.

**Release Management**

- Based on Release Planning according to ITIL definition.
- Defined Relationships and dependencies between each Release.
- Import job for the entire Release content.
- Additionally, “no risk” changes can be imported bundled.
Change Control Cycles and Change Documents

Continual Deployment

Phase Driven Deployment

Release Management

Normal Change

Urgent Change

Standard Change

General Change

Admin Change

All Change Documents available in all variants
My messages - Workflow Inbox
Standard Change

Highlights

- Standard change is used to perform low-risk changes that are uncritical and frequently used
- Changes can be processed without approval.
- Standard change is controlled by authorizations
Highlights

- **The White list** contains the objects that are allowed to be saved to a transport request of a Standard Change.

- **White List Objects** will be defined within Administration Cockpit.

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**Standard Change - White list**

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**Highlights**

- The **White list** contains the objects that are allowed to be saved to a transport request of a Standard Change.

- **White List Objects** will be defined within Administration Cockpit.
Pre-Configured Email Notifications for HTML Mailing

Change Request Management now features some pre-configured Email Notifications

- Based on HTML Mail functionality of SAP CRM
- Easy to adapt with own HTML Templates
- Triggering based on Actions and Conditions

Preconfigured for Standard Transaction Types

- Actions & Conditions already created
2  Risk Minimization
Ensure authorization of Changes via Approval Procedures

Avoid & **reduce risk of un-authorized changes** via Approvals

<table>
<thead>
<tr>
<th>Approval</th>
<th>Edit List</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insert</td>
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<tr>
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<tr>
<td>APPRO020</td>
<td>Financial approval</td>
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Create Request for Change  Validate Request for Change  Approval  Implementation
Enhanced Approval Management: Business Partner Check

Additional security and authorization checks

Business Partner check for approvals, integrated with delegates functionality

Approval Procedure

Step 1  General Approval  Approver A
Step 2  System Approval  Approver B

Approver A

Approver B

Other User

<< is substitute of >>

Substitute
Enhanced Approval Management: Group Approvals

Delegate approval decisions to groups

- Any member of the group, can perform the approval step

**Approval Procedure**

- **Step 1** General Approval - Approver A
- **Step 2** System Approval - [Group ABC]
Lower risk through consistent testing of Changes

Avoid surprises via built-in **4-eye principle** and integration with **Test Management** as well as **Business Process Change Analyzer**
Documentation & Logs overcome risk of undocumented Changes

Keep Overview via Detailed Logs and Change History
3 Integration in technical Tools
Change Request Management closes gaps between Processes and Technical Tools

**Process Layer:** Change & Release Management Process

- Create Request for Change
- Process Request for Change
- Handover to Execution
- Manage Change Execution
- Coordinate Release & Deployment
- Close Change

**Technical Layer:** Implementation / Execution of Changes

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Major benefits through deep technical integration

Save time and money: **less manual effort** through integration
Increase working comfort with integrated functions

Manage **ABAP** and **Non-ABAP** technologies via CTS+

Create and **Release Transports** in direct context of Changes

Control technical Deployment **via Workflow**
Automatic tracking of transports and changes

Get rid of endless spreadsheets through automatic change tracking for easier Release deployment.
IT Calendar Integration

Change Request Management is now integrated with the IT calendar of SAP Solution Manager

Establish a central IT calendar for all your changes, projects, work modes and downtimes

- Create a common Release calendar, and visualize the project schedules of your project cycles
- Create a Change calendar to show all planned changes for a certain time
Minimize effort for landscape synchronization with Retrofit

SAP Solution Manager can fully automate more than 90% of synchronization tasks between tracks with Retrofit.

- Work List of all transports to be synchronized (down to object level)
- Tool based
- Minimized risk through integration in the maintenance project and changes
- Logging of the changes
- Less manual effort for double maintenance (conflict and sequence visibility)

SAP NetWeaver BW & Non-ABAP supported
Synchronizing Maintenance and Innovation is an Issue

1) Start of Release Development
2) Issue in Production – Fix required
3) Perform Correction in Maintenance
4) Transport fix to Production
5) Synchronization issue in DEV
6) Manual check for conflict
   1) No conflict case: manual re-transport required
   2) Conflict case: manual resolution with high effort
7) Back to regular maintenance operations
Synchronizing Maintenance and Innovation is an Issue

1) Start of Release Development
2) Issue in Production – Fix required
3) Perform Correction in Maintenance
4) Transport fix to Production
5) Synchronization issue in DEV
6) Automatic check for conflict
   1) No conflict case: no action required - automatic transport
   2) Conflict case: easy resolution through tool support (e.g. split screen)
7) Back to regular maintenance operations

Retrofit fully automates 90% of synchronization tasks between tracks!
Major benefits through deep technical integration

1. Save time and money: **less manual effort** through integration

2. Ensure **integrity and safety** for your IT infrastructure
Ensure proper testing and reduced downtime

“Transport of Copies” is **built-in into standard** Change Request Management processes

**Iterative testing:** Possibility to test changes in QAS, without releasing original transports

Only original transport will be released - less transports for import mean **less import times**
Ensure integrity and safety for your IT infrastructure

Receive warnings before creating potential downgrade situations or creating a real downgrade!

1) Cross-System Object Lock (CSOL)

2) Downgrade Protection Checks
Avoid critical situations caused by changes on important objects

Create a **blacklist of critical objects** and control all changes to those sensitive objects with additional approvals

**Define critical objects via new Administrator’s Cockpit**

**Approve critical objects**
Major benefits through deep technical integration

1. Save time and money: less manual effort through integration

2. Ensure integrity and safety for your IT infrastructure

3. Get more flexibility without risking consistency
Flexibility for Managing Changes and Transports

Changes can be reassigned to another Change Request Management “Change Cycle”

Transports can be assigned or decoupled from a Change Document

*NEW* Released Transports via Central CTS
Flexibility when Importing Changes into Systems

Changes can be taken out of the Release and preliminary imported if required.
Flexible Import Options: Status driven Import

Technical import of transports dependent on status of Change Document

Solution Manager
Change Cycle 4711

Normal Change 1
Status: Successfully Tested

Normal Change 2
Status: Requires Re-Test

Normal Change 3
Status: Successfully Tested

Status = OK \(\rightarrow\) Import

Status NOT OK

Production System
Buffer of Production System
Major benefits through deep technical integration

1. Save time and money: less manual effort through integration

2. Ensure integrity and safety for your IT infrastructure

3. Get more flexibility without risking consistency

4. Keep the overview and benefit from additional transparency
Keep the overview and benefit from additional transparency

Instantly see all related technical transports, tasks and information when checking the content of a change
Don’t loose the link between Process- and Technical-Layer

Track the status of the imports directly in the Change Documents

Get notifications about potential risks or transport errors
Better traceability of Changes
Overview – Integration Features with SAP PPM

SAP PPM Project can be linked with SAP Solution Manager project
- Project Management specific information are set to read-only in SOLAR_PROJECT_ADMIN

PPM Tasks can create Change Transactions
- Link between Task and CRM Transaction will be established
- Relevant data is transferred from PPM Task to Change Transaction
- 1:1 relationship between Task and CRM document

Time Recording / Effort Feedback from Change to PPM Task
- Recorded effort will be transferred back to PPM for Project Management Office (PMO)
- Task status shall reflect status of CRM Document
Quick and Powerful monitoring and search functionality
Get the full traceability with Analytics, Reporting, Tracking, ...

KPI Dashboard & Reporting Functions

- **KPI Driven Analysis**: Get transparency about your Change Management process
- **Dashboard Builder** capabilities to enrich predefined KPIs with custom queries and functions

Transport Tracking Functions

- **Transport Analysis**: Get a fact sheet for a transport to see where it belongs to and what its status is
- **Sequence Dependency analysis**: Find out about sequence violations of customizing and workbench requests.
- **Delta Analysis** for Change Request Management based transports and changes.
Powerful reporting and analytics capabilities based on SAP BW

<table>
<thead>
<tr>
<th>Section with Related KPIs</th>
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<tbody>
<tr>
<td>Easy access to predefined Drilldowns</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Closed</th>
<th>Duration</th>
<th>Created</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>0.2</td>
<td>26</td>
</tr>
</tbody>
</table>

Switch between Table or Chart View
Administration Cockpit - unites all key information in a central place

- Task List & Import
- Scheduling
- Landscape Overview
- Full text Enterprise Search
- CSOL Data
- Tracking
- Transport Overview
Keep Track of Project and Requirements activities
SAP Solution Manager 7.2
Solution Documentation integrated with Project-, Change- & Release Management
Example: Structuring Projects (PPM) and Releases

- Project #1
  - Sub-Project 1
  - Sub-Project 2
- Project #2
- Project #3

Release Cycle #1
- ERP
- BW

Release Cycle #2
- CRM
- SRM

Release Cycle #3
- Portal

This is the current state of planning and may be changed by SAP at any time.
Process Entities “Requirements to Deploy”

- Incident
- Problem
- Request for Change
- Business Requirement
- IT Requirement
- Change Document
- SAP PPM Project
- Release
- Project Task
- Solution Manager

Diagram notes:
- Business Requirement relates to IT Requirement.
- IT Requirement relates to SAP PPM Project.
- SAP PPM Project relates to Project Task.
- IT Requirement assigns (n:1) Project Task.
- Request for Change results in Change Document.
- Handover to RfC in case of bug-fix.
- Create (1:n) between IT Requirement and Request for Change.
- Links to (1:1) between Release and Change Document.

This is the current state of planning and may be changed by SAP at any time.
6  Easy Adoption and highly customizable
Highly configurable according individual requirements

Entirely modular solution to ease adoption as much as possible

Many Customization and Configuration options to adapt to individual process requirements

Completely flexible User Interface for high end-user satisfaction
Lower TCO and get quicker ROI with Change Request Mgmt.

**No installation required** - mostly SAP Solution Manager is already part of IT landscape

Similar features as other tools plus **deep technical integration**

**Highly preconfigured:** best-practice processes from SAP for faster Return on Investment

**No additional license cost** - reduce longterm TCO
Change Control Management
The whole is more than the sum of its parts
More information needed?

Visit our **IT Service Management Wiki** in the SAP Community Network

- Presentations, Information, Demos around IT Service Management and Change Request Management
- Content is targeted and tailored for Managers, End-Users and Administrators

**Link:** [http://wiki.sdn.sap.com/wiki/display/SAPITSM](http://wiki.sdn.sap.com/wiki/display/SAPITSM)
Thank you.

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Title
Address
Phone number