Orchestrate Your Solution with SAP Solution Manager

Solution Documentation

Which processes do I use productively?

How to migrate existing documentation?
What is Reverse Business Process Documentation?

Reverse Business Process Documentation (RBPD) allows the customer to easily re-document his business processes directly from his SAP systems. The re-documentation is done by analyzing the actual usage of the system and is supported by comprehensive analysis content pre-delivered from SAP.

Usage analysis

SAP system

Pre-defined Content

Solution Documentation Assistant

SAP Solution Manager
Business changes happen without planning
Tool supported reverse business process documentation

Discovered Process model

Identification via Reverse Business Process Documentation

“Real” Usage

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Planned Process model

Implementation and configuration

“Expected” Usage

business changes
Solution Documentation

Content

What is covered by a Solution Documentation?

- Solution documentation means having documented core business processes including:
  - Documentation, e.g. process design, specifications, configuration or business test requirements
  - Technical objects, e.g. transactions, TBOMs, custom code, background jobs, system configuration, interfaces
  - System and software components (SAP and non-SAP)

- To ensure the best world wide communication the recommended documentation language is English

- RBPD provides tool support for identifying business processes, system components and transactions and assigning SAP standard documentation to used processes

<table>
<thead>
<tr>
<th>Tab</th>
<th>Logical Component</th>
<th>Transactions / TBOMs</th>
<th>Configuration</th>
<th>Development</th>
<th>Test Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process</td>
<td>Outbound Delivery with WM</td>
<td></td>
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<td>OD Integration Test</td>
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<td>Process Step</td>
<td>Create Sales Order</td>
<td>Z_ERP_CH</td>
<td>VA01</td>
<td>TBOM</td>
<td>IMG Object 1</td>
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<td>Z_ERP_CH</td>
<td>VL35</td>
<td>TBOM</td>
<td>IMG Object 4</td>
</tr>
</tbody>
</table>
RBPD – Schematic Data Flow

RBPD Content

Solution Documentation Assistant

Analysis Project

Analysis

Create

SAP Solution Manager Project

SAP Solution Manager
SAP Solution Manager and Business Process Blueprinting Integration

- Exchange of business process structures
- Transfer of transactions assigned to business process structures (User Interfaces)
- Representation of business process documents by links
- Representation of tasks and decision- start- and end points
- Interlink between processes (new with SP05)
Business Process Data upload

- Download of predefined excel templates
- Collection of relevant data
- Assignment to downloaded file
- Data migration by uploading the fine into SAP Solution Manager
Sources for Structures
Demo

- Initial Solution Re-Documentation with Reverse Business Process Documentation (RBPD)
- Bring process structure in a sequence with Business Blueprint (SOLAR01)
- Graphically model process flow with Business Process Blueprinting (BPB)
- Enrich Process Structure with documents via xls upload
Maintain Process Structures for Non-SAP Products

Demo:

- Add a non-SAP process step, including interface and KW documentation
- Add documentation stored on an external file share
Change Impact Analysis

Planned Change Event

- Change of ABAP-Code
- Change of Customizing
- Application of SAP Note
- Application of SAP Support Package
- Application of SAP Enhancement Package
- Activation of SAP Business Function

Affected Business Processes?

Scope for Regression Test?

Test Effort

Test Coverage
Preparation: Technical Bill of Material (TBOM)

Options to create TBOMs in SAP Solution Manager

1. Manual creation from business blueprint
2. Manual creation by business users using TBOM work items
3. Creation in background during manual testing
4. Automated creation using Test Automation Framework (eCATT or certified 3rd party)
5. Automated creation using SAP TAO as part of Test Option 2
Change Impact Analysis

Planned Change Event

- Change of ABAP-Code
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Affected Business Processes?

- Business Process 1
  - Business Process Step 1
  - Business Process Step 2
  - Business Process Step 3
- Business Process 2.. n
  - Business Process Step 1
  - Business Process Step 2
  - Business Process Step 3..

Scope for Regression Test?

Test Effort

Test Coverage
Preparation: Technical Bill of Material (TBOM)

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5. Automated creation using SAP TAO as part of Test Option 2
Approach:
Whenever a test is performed (e.g. due to new Requirements, an Release Upgrade, Support Package update, frequent changes) it is an occasion to create or update TBOMs for the relevant Transaction in background without additional effort.
Best Practice
Solution Documentation in ALM
Agenda

- Business Process definition
- Business Process design
- Assignments
- Best Practice Cases
Structure Definition
Business Process Step

An elementary activity performed to accomplish a process.

- Characteristics of a business process step:
  - is carried out by the user or by the system
  - runs in only one software component
  - is relevant to implementation and/or operation

- In many cases, a business process step is represented by a transaction
A business process is composed of several business process steps

- A business process can run across several SAP components and possible non-SAP software

- A business process may occur in one or more business scenarios

“A set of logically related tasks performed to achieve a defined business outcome”

- Davenport & Short (1990)
Business Scenario

A business scenario is a set of processes that define a business task in a comprehensive and self-contained manner on a macro level.

- Business Scenario is normally related to a company’s business unit, a central function, or a profit centre and it can also involve business partners from other companies.
- Business Scenario requires one or more SAP components and possibly non-SAP software.
- Business Scenario may consist of a number of variants, each of them describing an end-to-end business flow.
- Each end-to-end business flow is represented by an ordered sequence of business processes.
Agenda

- Business Process definition
- **Business Process design**
- Assignments
- Best Practice Cases
Creating a Business Process Structure

There are two reasonable ways of documenting business processes in SAP Solution Manager. This presentation is describing them and providing their advantages and disadvantages.

Though, it is difficult to define what end-to-end really means. Consequently, this definition makes most difficulties on the beginning of business process documentation and are mostly connected with organizational aspects. However this is the most reusable business process model. Apart from documentation purposes, the clear re-use of this business process design is in test capabilities, interface documentation and business process monitoring. It would be recommended to use structure attributes or custom attributes for documents for all who organize the business process documentation in relation to SAP modules.

In the business process hierarchy the prefixes shall reflect the execution of steps and can be directly re-used in test sequences for integration tests.
Business Process Model
Names and Structure Attributes

Creating a Business Process Structure

The restriction of three structure levels in SAP Solution Manager leads to the necessity to create name convention for the business processes and scenarios.

Additionally as of support package 15 (EHP 1) for SAP Solution Manager 7.0, it is possible to define and use structure and object attributes. Structure attributes can support all types of filtering or reporting capabilities during typical project phases like blueprint, configuration, test or after Go Live in maintenance. The biggest advantage of structure and object attributes is that those attributes compared to keywords can be copied with the structure, wherever the structure is re-used.

Once assigned, structure attributes can also be adjusted with the Compare&Adjust functionality using transaction SA_PROJECT_UPGRADE. This ensures that all changes done to attributes and their assignment to the business processes or business process steps will be current at all times through the entire business process lifecycle.
Business Scenario Design
For Module Oriented Process Design

Name convention and Customer attributes

For all customers who are organized modular (Business Process responsibility, maintenance activities, projects) another business process model can be recommended. In this model you can combine modular build business processes (process flow within one SAP Module) and then combine it with other modular processes in a scenario to an End-to-End Business scenario.

To do so, use the Graphic tab at scenario level to document the order in which the business processes are to be executed. Alternatively Business Process Blueprinting tool can be used to detailed represent the End-to-End flow within the business scenario. As of SP5 the graphic from Business Process Blueprinting will be represented also in SAP Solution Manager at Business Scenario level.

In the business process hierarchy the prefixes shall reflect the execution of steps and can be directly re-used in test sequences for integration tests.
Agenda

- Business Process definition
- Business Process design
- **Assignments**
- Best Practice Cases
Business Process Documentation
Typical Object Assignments

The table shows examples of document types which should be made available in SAP Solution Manager to document business processes, their interfaces and prepare for other functionalities like testing or training management.

- **Reuse of documents by links.** In order to decrease the number of documents you can link documents to the same business process steps used in different business processes (basic documentation). Additional documents describing the differences can be then assigned selective to the occurrence.

- **Use of a common final status value for all document types (documents).** All document types shall use the same or different status schema(s). Every status schema ends with the same common final status value.

- **Reduce the number of assigned documentation types by documenting business processes and steps by technical object assignments like transactions, IMG, development objects and so on.**

<table>
<thead>
<tr>
<th>Document Type/Object</th>
<th>Description</th>
<th>Structure</th>
<th>Tab</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZCON</td>
<td>Configuration Description</td>
<td>Business Process/Step</td>
<td>Configuration</td>
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<td>Technical Specification</td>
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<td>ZINT</td>
<td>Interface Description</td>
<td>Interface Step</td>
<td>Gen. Documentation</td>
</tr>
</tbody>
</table>
Agenda

• Business Process definition
• Business Process design
• Assignments
• Best Practice Cases
  • One project as single source of truth
    (for documentation, maintenance, test and change)
  • This alternative is most suited if you are interested in basic and centralized solution documentation with strong integration aspects to test management and business process change analyzer. The solution documentation is performed in one central project representing all documentation activities in your organization.
Case I:
One project as single source of truth

Method description

In this use case all business processes organized in business scenarios are stored centrally in a project. All activities like documentation of maintenance new implementations are performed centrally in this project. Business Process Steps contain technical documentation like IMG, development objects as well as preparation for testing (test cases and scripts) Test Management and Change Management is linked to this central repository.

Document Management:
The business processes are basically documented mostly by business or scenario design documents. Versioning of documents can be realised by content chapters or by creation of new document versions.

Test Management
All test types are performed based on the central business process library including released test cases and scripts. Creation of manual test plans based on released test cases. Reuse of test plans by copy of existing test plans and regeneration for delta detection.

Business Process Change Analyzer
Creation of TBOMs based on transactions assigned to business process steps allows use of BPCA for test scope detection and optimization.

Change Request Management
All Change Requests/documents link to the business processes to update process documentation in the central library.
Agenda

- Business Process definition
- Business Process design
- Assignments

**Best Practice Cases**

- Solution Directory as single source of truth
  (for documentation, controlled maintenance, major release, test and change)

  *This alternative is most suited if you have simple system landscape with synchronized maintenance cycles for all systems within your landscape. The solution documentation is extended by document versions between Solution and Maintenance project and close integration to Change Request Management and Test Management.*
Case II: Solution Directory as single source of truth

Method description

This Use Case can be proposed to all customers who document their current productive environment and all products collected in this documentation is following the same maintenance cycle. The central storage is a solution connected with a maintenance project. In this maintenance project all planned maintenance activities will be documented and reflected in the solution (Checkout/In). Major releases can be represented by separate implementation/upgrade project(s) scoping all relevant business processes from solution.

Document Management:
“Version management” between documents in maintenance and versions stored in solution. For major release project all documents linked with late copy. Actions on these documents force copy of the original and allows redesign description.

Test Management
Can be performed based on the maintenance and major release project. Integration and regression testing can be performed in test plans created based on solution*.

Business Process Change Analyzer
Creation of TBOMs based on transactions assigned to business process steps allows use of BPCA for test scope detection and optimization.

Change Request Management
All Change Requests/documents link to the business processes to update process documentation solution or major release project depending on its nature (Correction or new implementation)
*) creation of new test plan required
Agenda

• Business Process definition
• Business Process design
• Assignments
• **Best Practice Cases**
  • Enhanced Lifecycle model as single source of truth
    (for documentation, controlled maintenance of global processes, major release, test and change)
    • *This alternative is most suited if you are interested in documentation of very complex ALM activities. It helps to document maintenance activities with different maintenance cycles and at the same time managing documentation of major releases and new implementation projects and central process library collected in a specific template project.*
Case III: Enhanced Lifecycle model as single source of truth

Method description

The Global Repository project (template) reflect all business processes used for a company. The documentation is done based on document and technical object assignment. Global maintenance is performed in maintenance projects with different maintenance cycles. These projects are sharing the business processes from central repository. All documents are linked between these two types of project. The versioning is done within the document content.

Regression Testing Project (type implementation) is storing the last release information of all business processes but just focusing on the business process structure, transaction assignments, test cases and scripts. The test plan including all test packages and tester assignments can be used as copy master for future test activities. BPCA can detect and optimize the test scope.

Solution is including just parts of business processes which are relevant for monitoring purposes and is not including documentation. Just appropriate business process steps with related transactions and interfaces will be used for Business Process And Interface Monitoring.

Synchronization between all assurances is done after every maintenance cycle or accordingly to release cycle by “Compare & Adjust” functionality with defined scope.

Implementations can be performed as a mix of already documented (from Global Repository) and new business processes.
Case III: Enhanced Lifecycle model as single source of truth

Method description

- **Document Management**: Synchronization of documents between Global Repository and maintenance projects by use of links. New implementation is using late copy of documents and have to be merged into the existing documentation after GoLive.

- **Test Management**: Is performed based on maintenance project scope as well as implementation project scope. Regression test is performed on a separated for this purpose project including information from last release.

- **Business Process Change Analyzer**: Creation of TBOMs based on transactions assigned to business process steps allows use of BPCA for test scope detection and optimization.

- **Change Request Management**: All Change Requests/documents are linked to the appropriate project to which it is belonging. Changes of documents is performed decentralized in appropriate project to which the change document is belonging to.