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Welcome to the Implement S/4HANA with SAP Best Practices Reference Guide. This document describes how SAP Activate and SAP Solution Manager 7.2 are used together to implement SAP S/4HANA. SAP Activate includes:

- SAP Best Practices for SAP S/4HANA
- Implementation methodology
- Tools for guided configuration

The reference guide can be used by customers, partners and consultants free of charge and provides accurate and up-to-date detailed technical information based on what is possible with the current releases of software. It provides granular knowledge for administrators of SAP Solution Manager 7.2, SAP Best Practices and the SAP S/4HANA systems. Administrators might use content from this guide to brief project team members and some sections can be used by project team members directly. Although other resources are available for each topic separately, this reference guide brings the content together in one place and describes how to use the tools and content together. The guide is designed to complement the SAP S/4HANA roadmaps available here. It will provide additional technical detail for experts.
1. Introduction

The structure and content of the guide is as follows and includes the SAP Activate methodology phases:

- **Introduction**: key concepts, overview of scenarios, different options and overall benefits.
- **Discover**: what resources are available before an SAP S/4HANA project starts.
- **Prepare**: infrastructure is set up and selected SAP Best Practices are activated.
- **Explore**: workshops define the solution and use SAP Best Practice processes.
- **Realize**: implementation is undertaken tracking all work in SAP Solution Manager.
- **Deploy**: SAP Solution Manager is used in the production cutover.
- **Run**: SAP Solution Manager is used to monitor and optimize the solution.

SAP S/4HANA can be deployed on-premise, in the cloud or in a hybrid scenario with on-premise and cloud. The implementation approach is different for on-premise and cloud solutions.

Customers new to SAP or customers with an existing SAP landscape may be implementing SAP S/4HANA. Three transition scenarios are described in this section: New Implementation, System Conversion and Landscape Transformation. The reference guide focuses on New Implementation for on-premise / hybrid projects. This is because SAP Solution Manager 7.2 is typically used with on-premise and hybrid SAP S/4HANA projects only. SAP Solution Manager 7.2 provides new features designed specifically to implement SAP S/4HANA with SAP Activate. With these new features it provides full lifecycle support and a single source of truth during implementation and for operations after the project go-live.

1.1. SAP S/4HANA

The SAP S/4HANA next generation suite is available in these offerings:

- SAP S/4HANA Enterprise Management
- SAP S/4HANA Enterprise Management Cloud
- SAP S/4HANA Professional Services Cloud
- SAP S/4HANA Marketing Cloud
- SAP S/4HANA Finance Cloud
- SAP S/4HANA Manufacturing Cloud

An overview of the solutions can be found [here](#). The table below shows some of the key differences between on-premise and cloud solutions.

<table>
<thead>
<tr>
<th></th>
<th>SAP S/4HANA On-premise</th>
<th>SAP S/4HANA Cloud</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licensing model</td>
<td>Traditional Licenses</td>
<td>Subscription licenses</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Customer controls deployment and</td>
<td>SAP provides systems and is responsible</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>SAP S/4HANA On-premise</th>
<th>SAP S/4HANA Cloud</th>
</tr>
</thead>
<tbody>
<tr>
<td>maintenance</td>
<td>for maintaining the infrastructure</td>
</tr>
<tr>
<td>Innovation</td>
<td>Customer has control of innovation, downtimes and changes</td>
</tr>
<tr>
<td>Implementation</td>
<td>Individual requirements for business processes and customization</td>
</tr>
<tr>
<td>Scope</td>
<td>Full ERP scope and integration with cloud solutions</td>
</tr>
<tr>
<td>Custom code</td>
<td>Full traditional ABAP extensibility</td>
</tr>
</tbody>
</table>

| SAP S/4HANA Cloud                          | In-app extensibility with limited ABAP, SAP HANA Cloud Platform as extension |

All solutions provide hybrid scenarios with integration to SAP Ariba network, SuccessFactors, hybris and SAP Cloud for Customer. More information on hybrid scenarios per line-of-business can be found [here](#). Examples include:

- Human Resources: integration to SAP SuccessFactors Employee central.
- Procurement and business networks: integration to SAP Ariba for purchase orders and invoices.
- Customer Engagement: integration to SAP Cloud for Customer for opportunities.
- Finance: integration to SAP Financial Services Network.

1.2. **SAP S/4HANA implementation or transition scenarios**

Customers new to SAP or customers with an existing SAP landscape may be implementing SAP S/4HANA. SAP has defined three transition scenarios:

- New Implementation: for customers migrating from a legacy system and also known as a “greenfield” approach. The legacy system might be an existing SAP solution.
• System Conversion: for customers who want to convert their current system into an SAP S/4HANA system. They can convert database, SAP NetWeaver and applications in one step.
• Landscape Transformation: for customers who want to consolidate their landscape or to selectively transform data into an SAP S/4HANA system.

The content about SAP Solution Manager 7.2 in this reference guide covers on-premise new implementation but some of it is also relevant for the other two scenarios. In pure cloud new implementation, SAP Solution Manager 7.2 is not typically used.
This guide focuses on the New Implementation on-premise approach, where you activate the standard SAP Best Practice processes as your starting point. In the System Conversion and Landscape Transformation approaches, the existing SAP solution is the starting point and SAP Best Practices are just used as a reference solution.
For more information about the three transition scenarios refer to this white paper.

1.3. SAP Activate
As stated earlier, SAP Activate consists of three elements:
• SAP Best Practices for SAP S/4HANA: technical content and documentation accelerators that help you get up and running quickly with pre-configured best practice scenarios.
• Implementation methodology / roadmap: the SAP Activate methodology replaces ASAP as SAP’s implementation methodology for SAP S/4HANA and all other SAP solutions.
• Tools for guided configuration: tools to activate SAP Best Practices in the SAP S/4HANA on-premise solution and configure and test the SAP S/4HANA cloud solution.
You can get an overview of SAP Activate by looking at this presentation. However, the key points you need to know are in this introduction.
SAP recommends that SAP Activate is used in conjunction with SAP Solution Manager 7.2 for on-premise implementations but Solution Manager 7.2 is not a mandatory requirement for the S/4HANA implementation. The benefits of using SAP Activate are:

- A faster, less service intensive, initial implementation leading to faster time-to-value.
- Rapid adoptions of innovations throughout the solution lifecycle.
- A flexible framework and implementation foundation that can be extended by customers and partners.

1.4. SAP Best Practices for S/4HANA

SAP Best Practices have been available for SAP solutions for many years. They consist of pre-configured best practice processes and related documentation accelerators such as business process diagrams and test scripts. Some SAP Best Practices are also available as Rapid Deployment Solutions.

With SAP S/4HANA cloud solutions, the predefined SAP Best Practices are part of the standard solution provided by SAP in the cloud. With SAP S/4HANA on-premise solutions, the SAP Best Practices are activated by the customer using the SAP Best Practices Solution Builder tool or delivered as part of the SAP S/4HANA Software Appliance. (We refer to SAP Best Practices Solution Builder as SAP Solution Builder within this guide). The content and tool are shipped with the on-premise software. On-premise customers can use the SAP S/4HANA Software Appliance to speed up the setup of their infrastructure. This has the SAP Best Practices already activated.

SAP Best Practices provide a configured solution that forms a foundation for your project. On-premise customers can select which SAP Best Practices content to use and then make changes or add project specific scope. Cloud customers can refine the configuration within fixed solution boundaries.
SAP Best Practices content for SAP S/4HANA is organized into three layers:

- **Scope Items**: typically a pre-defined business process, such as sales order processing. They represent a Best Practices implementation choice for you. Each scope item has a set of accelerators delivering detailed documentation that is used during the implementation project. Examples accelerators are process diagrams and test scripts. Scope items require specific building blocks to be implemented.

- **Building blocks**: a set of configuration for a piece of business content such as credit management. The accelerators include the configuration content to implement the scope item(s), sample organization data, sample master data and project documentation such as configuration guides.

- **Package**: a selection of scope items that cover the scope of the SAP S/4HANA solutions or other leading industry or line of business segments. Examples accelerators are a customer presentation and software and delivery requirements document.

You can view all the SAP Best Practices and Rapid-deployment Solutions provided by SAP at this link [https://service.sap.com/public/solutionpackages](https://service.sap.com/public/solutionpackages).
1.5. Implementation methodology / roadmap

As stated, the SAP Activate methodology replaces ASAP as SAP’s implementation methodology for SAP S/4HANA and all other SAP solutions. There are generic / general variants of the methodology that are not software solution specific and there are solution specific variants e.g. the SAP S/4HANA roadmap.

The methodology content is organized into a three level hierarchy:

- Phases
- Deliverables
- Tasks

Each node in the hierarchy has a description that provides SAP’s advice and guidance. Each node also links to documentation accelerators that may be generic e.g. an open issues template or solution specific e.g. administration guide for SAP S/4HANA on-premise.

The SAP S/4HANA specific methodology is called a roadmap and is available in two ways:

- Online read-only information in the roadmap viewer (https://go.support.sap.com/roadmapviewer/ shown below).
- Project within SAP Solution Manager 7.2 where it can be changed to reflect the specifics of your project.

The SAP Activate phases and their main activities are:

- **Discover**: define and agree the scope of the project.
- **Prepare**: the project is formally initiated, SAP Best Practices are activated and project planning is started.
- **Explore**: verify solution scenarios meet business needs and document delta scope and gaps.
- **Realize**: customer specific requirements are configured and implemented. The solution is tested to check that it matches the agreed design.
- **Deploy**: you will train end users, undertake data migration and provide support during the go-live.
- **Run**: monitor and optimize the solution.
### 1.6. Tools

Currently, the tools used to undertake implementations are different for on-premise and cloud solutions of SAP S/4HANA. The summary below applies for the New Implementation scenario and will be different for System Conversion and Landscape Transformation. This reference guide focuses on on-premise.

<table>
<thead>
<tr>
<th>Topic</th>
<th>On-premise Projects (and hybrid projects including cloud)</th>
<th>Cloud Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activate SAP Best Practices Content</td>
<td>SAP Best Practices Solution Builder is used to activate the SAP Best Practices. You can select what scope items to activate.</td>
<td>The cloud solution including SAP Best Practices is activated by SAP in the cloud landscape.</td>
</tr>
<tr>
<td>Customer specific configuration</td>
<td>Use Implementation Guide (IMG) to change and extend the configuration. Changes can be tracked in SAP Solution Manager 7.2.</td>
<td>You can use SAP S/4HANA Manage Your Solution app to configure certain solution parameters.</td>
</tr>
<tr>
<td>Test Processes</td>
<td>SAP Solution Manager 7.2 can be used to track and manage the test process.</td>
<td>You can use SAP S/4HANA Manage Your Solution app to test SAP Best Practices processes.</td>
</tr>
<tr>
<td>Migrate Data</td>
<td>Undertaken in the same way as a SAP ERP project</td>
<td>You can use SAP S/4HANA Manage Your Solution app to execute data migration</td>
</tr>
<tr>
<td>Manage solution lifecycle</td>
<td>SAP Solution Manager 7.2 is used to manage the implementation and operations.</td>
<td>SAP Solution Manager 7.2 is not typically used.</td>
</tr>
<tr>
<td>Access S/4 roadmap</td>
<td>Roadmap viewer or project in SAP Solution Manager 7.2</td>
<td>Roadmap viewer or downloaded plan in Excel</td>
</tr>
</tbody>
</table>

### 1.6.1. On-premise SAP S/4HANA tools

SAP Solution Manager 7.2 is an on-premise system used to manage the implementation and operation of the SAP S/4HANA solution. SAP Best Practices S/4HANA content is available for SAP Solution Manager 7.1 and 7.2 but customers are advised to use SAP Solution Manager 7.2 which has new features to support SAP S/4HANA implementations.

SAP Best Practices Solution Builder is a tool that is part of the SAP S/4HANA on-premise software. As you will see later, the tool allows you to semi-automate the configuration of the SAP Best Practices processes.
1.6.2. **Cloud SAP S/4HANA tools**

SAP uses Content Lifecycle Management to deliver new configuration for each new cloud release. The apps and tools for cloud implementations allow a customer to implement the SAP S/4HANA cloud solution within the boundaries defined by Content Lifecycle Management. They include:

- Self-Service Configuration UIs (SSCUIs) where the customer can undertake configuration.
- An environment for organizing and executing process-oriented testing activities for SAP Best Practices processes, based on pre-scripted test cases.
- Access to the SAP Learning Hub where you can launch and share information in learning rooms in a collaborative fashion.
- Expert configuration: this is used by SAP to undertake configuration on behalf of the customer where SSCUIs are not available.

You find more information on the guided implementation approach for cloud solutions [here](#).

1.7. **SAP Solution Manager 7.2**

SAP Solution Manager 7.2 provides lifecycle management for SAP and non-SAP solutions. The picture below summarizes the key capabilities.
As a customer, you can choose which capabilities to use in your project. The following capabilities may be used in your on-premise or hybrid implementation:

- **Business requirements and IT requirements**: central storage of requirements along the SAP S/4HANA implementation lifecycle. Manage and approve requirements leading to agile developments.

- **Project management**: plan and manage the schedule and resources for your implementation. Use the SAP Activate roadmap as your starting point and modify it to suit your needs.

- **Process management**: SAP Solution Manager 7.2 provides a new way to manage your business processes with a new user interface and integrated process diagram editor. SAP Best Practices packages fully replace the former Business Process Repository (BPR) content. You can leverage the pre-configured SAP Best Practices processes for SAP S/4HANA.

- **Change and release management**: provide change deployment control and risk mitigation. Changes to the SAP S/4HANA system and solution documentation are synchronized in one process.

- **Test management**: test and deploy your SAP S/4HANA solution keeping track of all test scripts, test cases and test results.

You can find more information here: [http://support.sap.com/solutionmanager](http://support.sap.com/solutionmanager)

### 1.7.1. SAP Best Practices packages available for SAP Solution Manager 7.2

SAP Best Practices packages can be imported online into SAP Solution Manager 7.2. Each package provides process and configuration content such as process diagrams, test scripts and configuration guides. The packages are regularly improved and updated with each S/4HANA release.

In SAP Solution Manager 7.2, the list of available SAP Best Practices packages for current S/4HANA versions can be seen in solution administration. This is shown in the prepare phase section of this guide. Some packages for former versions are also made available.

Some S/4HANA Best Practices can also be imported into SAP Solution Manager 7.1. However, the graphical BPMN modelling is not supported there. To start the import go to the software download center and import...
Implement SAP S/4HANA on-premise with SAP Best Practices - Reference Guide

the latest version of the software component ST-RDS. The SAP S/4HANA roadmap can be imported to SAP Solution Manager 7.1 via PPM - Projects in the Implementation / Upgrade work center.

1.7.2. Solution lifecycle in SAP Solution Manager 7.2

Your SAP solution will consist of a number of systems, applications and business processes. In order to maintain and support a live system, changes must be continuously prepared, tested and deployed. In parallel, projects may be underway to deliver new releases from time to time. This is called the solution lifecycle and is managed in SAP Solution Manager 7.2. You can track changes to system content e.g. configuration settings and changes to documentation e.g. process diagrams.

In SAP Solution Manager 7.1, the business process structure and relevant documentation were maintained in a “project”. After the implementation go-live, the content from the “project” was pushed into a “solution” for maintenance and monitoring.

In SAP Solution Manager 7.2, the role of “solution” has changed. The solution documentation including the business process structure, documentation and versions are maintained in the “solution”. A project in SAP Solution Manager 7.2 is exclusively used for project management.

In this reference guide, SAP Solution Manager 7.2 is referred to as the managing system. It is used to administer the managed system which, in this guide, refers to the SAP S/4HANA system and any other systems in the solution landscape.

1.7.3. Benefits of using SAP Solution Manager 7.2

Some of the benefits of using SAP Solution Manager 7.2:

- Covers the entire S/4HANA solution lifecycle from implementation to operation. Once the solution is live, all the SAP Solution Manager 7.2 operational features such as monitoring and root cause analysis can be used.

- Jump start your project using SAP Best Practices content for configuration and solution documentation.

- Take advantage of a new user interface and new features designed specifically for SAP S/4HANA.

- SAP Solution Manager 7.2 can run on a HANA database.

- Enhancements to support hybrid projects that include on-premise and cloud solutions.

- A faster and simpler approach to importing business content such as SAP Best Practices.

- Improved solution documentation including process diagrams that can be published outside SAP Solution Manager 7.2 in the standard Business Process Management Notation (BPMN).

- A single source of truth across project and support activities leads to faster decisions with lower risks.

- Reduce project management and administration costs with transparency of project phases and integration into transport management.

- Improve testing efficiency by knowing what to test when and managing test cases and test progress efficiently.

- Improve management of custom code leading to lower costs.
### 1.8. Activities during SAP S/4HANA new implementation

The table below provides a summary of the activities undertaken using SAP Best Practices and SAP Solution Manager 7.2 during each of the project phases. The rest of the reference guide provides more detail. Also, the table shows the systems involved and which roles the content is relevant for (functional team in the roles column refers to solution architects, functional leads and consultants).

<table>
<thead>
<tr>
<th>Activities</th>
<th>Roles</th>
<th>Systems Involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discover</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discover: Access to trial systems</td>
<td>Administrator</td>
<td>SAP S/4HANA and SAP Solution Manager 7.2</td>
</tr>
<tr>
<td>Discover: Access SAP Best Practices documentation</td>
<td>Administrator and functional team</td>
<td>Best Practices Explorer</td>
</tr>
<tr>
<td>Discover: Review SAP S/4HANA implementation roadmaps</td>
<td>Project manager and administrator</td>
<td>Roadmap Viewer</td>
</tr>
<tr>
<td>Discover: Decide whether to use SAP S/4HANA Software Appliance</td>
<td>Administrator</td>
<td></td>
</tr>
<tr>
<td>Prepare</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepare: Define and setup system landscape (managed and managing system)</td>
<td>Administrator</td>
<td>SAP Solution Manager 7.2,SAP S/4HANA</td>
</tr>
<tr>
<td>Prepare: Choose SAP Best Practices packages and activation approach</td>
<td>Administrator and functional team</td>
<td>SAP Best Practices Explorer, SAP Solution Manager 7.2,SAP S/4HANA</td>
</tr>
<tr>
<td>Prepare: Consider and clarify whether multiple SAP Best Practices packages will be used</td>
<td>Administrator and functional team</td>
<td>SAP Best Practices Explorer, SAP Solution Manager 7.2,SAP S/4HANA</td>
</tr>
<tr>
<td>Prepare: Create solution</td>
<td>Administrator</td>
<td>SAP Solution Manager 7.2</td>
</tr>
<tr>
<td>Prepare: Decide whether a template solution will be used</td>
<td>Administrator</td>
<td>SAP Solution Manager 7.2</td>
</tr>
<tr>
<td>Prepare: Setup requirement management or Change Request Management (ChaRM)</td>
<td>Administrator</td>
<td>SAP Solution Manager 7.2</td>
</tr>
<tr>
<td>Prepare: Using requirements management to control changes</td>
<td>Administrator</td>
<td>SAP Solution Manager 7.2</td>
</tr>
<tr>
<td>Prepare: Using request for change to control changes</td>
<td>Administrator</td>
<td>SAP Solution Manager 7.2</td>
</tr>
<tr>
<td>Prepare: Create project for project management</td>
<td>Project manager and administrator</td>
<td>SAP Solution Manager 7.2</td>
</tr>
<tr>
<td>Prepare: Activate SAP Best Practices configuration in SAP S/4HANA using Software Appliance</td>
<td>Administrator</td>
<td>SAP Solution Builder, SAP S/4HANA</td>
</tr>
<tr>
<td>Prepare: Activate SAP Best Practices configuration in SAP S/4HANA using SAP Solution Builder</td>
<td>Administrator and functional team</td>
<td>SAP Solution Builder, SAP S/4HANA</td>
</tr>
<tr>
<td>Prepare: Import SAP Best Practices content into SAP Solution Manager 7.2</td>
<td>Administrator and functional team</td>
<td>SAP Solution Manager 7.2</td>
</tr>
<tr>
<td>Prepare: Importing multiple SAP Best Practices into SAP Solution</td>
<td>Administrator and functional team</td>
<td>SAP Solution Manager 7.2</td>
</tr>
</tbody>
</table>
### 1.9. Use cases covered in the reference guide

There are different use cases and hence choices that you must make when implementing SAP S/4HANA. The key choices are listed below highlighting the scenarios that are the focus of this reference guide.

- **On-premise or cloud**: the reference guide covers on-premise and hybrid implementations using SAP Solution Manager 7.2. Cloud implementations are not explicitly covered.

- **SAP S/4HANA implementation or transition scenarios**: SAP Best Practices are used to their full extent in the New Implementation transition scenario which is the focus of the reference guide. Some guidance is provided on how to combine SAP Best Practices with existing SAP Solution Manager content.

- **SAP Solution Manager 7.2 usage**: the reference guide assumes that you use the following features: business requirements, IT requirements, project management, process management, change and
release management, and test management. The minimum usage is process management and change management.

- **SAP S/4HANA Software Appliance**: you must choose whether to use the SAP S/4HANA software appliance to set up the on-premise system. If it is not used, the SAP Best Practices are activated using SAP Solution Builder.

- **Sandbox Environment**: the reference guide covers the optional use of a separate sandbox environment.

- **Multiple SAP Best Practices package**: it is possible to implement multiple SAP Best Practices packages. For example, packages for SuccessFactors, analytics or data migration might be added to the SAP S/4HANA package for multiple countries. The reference guide provides guidance on implementing multiple packages.

- **Template approach**: a project can create a template and then roll this in multiple implementations. This version of the reference guide assumes a template approach is not used.

- **Multiple languages**: the reference guide assumes that a single project language is used in SAP Solution Manager 7.2.

### 1.10. Helpful information sources

The following locations are valuable sources of information:

- **Presentation** that summaries this reference guide.
- **Explore SAP Best Practices and Rapid Deployment Solutions**: [https://rapid.sap.com/bp](https://rapid.sap.com/bp)
- **Implementation of SAP S/4HANA**: [https://open.sap.com/courses/s4h4](https://open.sap.com/courses/s4h4)
- **SAP S/4HANA Implementation and Configuration Learning room**: register [here](https://open.sap.com/courses/s4h4)
- **SAP Activate in Roadmap Viewer**: [https://go.support.sap.com/roadmapviewer/](https://go.support.sap.com/roadmapviewer/)
- **SAP Solution Manager 7.2 EKT Learning Map**
- **SAP Solution Manager 7.2**: [http://support.sap.com/solutionmanager](http://support.sap.com/solutionmanager)
- **SAP S/4HANA transition scenarios white paper**.

### 1.11. List of demos in the reference guide

The table below lists the demos covered as a part of this reference guide:

<table>
<thead>
<tr>
<th>Chapter name</th>
<th>Section</th>
<th>Topic</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to SAP S/4HANA and SAP Solution Manager 7.2 trial systems</td>
<td>Discover</td>
<td>Getting access to an SAP S/4HANA Trial System</td>
<td>Link</td>
</tr>
<tr>
<td>Access SAP Best Practice documentation</td>
<td>Discover</td>
<td>Use of service market place for SAP Best Practices</td>
<td>Link</td>
</tr>
<tr>
<td>Access SAP Best Practice documentation</td>
<td>Discover</td>
<td>Use of SAP Best Practices Explorer for SAP Best Practices</td>
<td>Link</td>
</tr>
<tr>
<td>Solution Documentation</td>
<td>Prepare</td>
<td>Creation of solution in SAP Solution Manager</td>
<td>Link</td>
</tr>
</tbody>
</table>
### 7.2 Define a change cycle and create a task list

**Prepare**  
Creation of phase cycle and associated task list  
[Link](#)

### 7.3 Create business requirement

**Prepare**  
Creation of business requirement  
[Link](#)

### 7.4 Create IT requirement

**Prepare**  
Creation of IT requirement  
[Link](#)

### 7.5 Using request for change in prepare phase

**Prepare**  
Creation of request for change and generation of change document  
[Link](#)

### 7.6 Import reference project plan

**Prepare**  
Download of project plan and import into SAP Solution Manager 7.2 project management  
[Link](#)

### 7.7 Scope and activate SAP Best Practices

**Prepare**  
Activation of SAP Best Practices configuration content using SAP Solution Builder  
[Link](#)

### 7.8 Identify, select and load SAP Best Practices content into SAP Solution Manager 7.2

**Prepare**  
Import of SAP Best Practices into SAP Solution Manager 7.2  
[Link](#)

### 7.9 View SAP Best Practices content in SAP Solution Manager 7.2

**Prepare**  
SAP Best Practices content in SAP Solution Manager 7.2  
[Link](#)

### 7.10 Align process models

**Prepare**  
Process structure modifications  
[Link](#)

### 1.12. Glossary of Terminology

The table below summarizes from of the terminology in the reference guide.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branch</td>
<td>A branch represents a version of the solution documentation containing processes, libraries, applications, and systems. It offers a staging area for the “to-be” business processes, which can be used for early business process design as well as for implementation projects.</td>
</tr>
<tr>
<td>Building Blocks</td>
<td>A set of configuration for a piece of business content such as credit management. The accelerators include the configuration content to implement the scope item(s) and project documentation for the building block.</td>
</tr>
<tr>
<td>Business Process</td>
<td>The main structuring node level in SAP Solution Manager solution documentation. In SAP Best Practices Solution Builder, the Scope Item is the counterpart of the SAP Solution Manager Business Process.</td>
</tr>
<tr>
<td>Business Process Step</td>
<td>The deepest structuring node level in SAP Solution Manager. Here, the application calls (for example, transactions, CRM Web Client) are assigned</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Business requirement</td>
<td>representing the process step in the SAP system.</td>
</tr>
<tr>
<td>Business requirement</td>
<td>A document for the business to capture their requirements e.g. requirements from the explore phase workshops. They are handed over to the IT team for further action.</td>
</tr>
<tr>
<td>Business Scenario</td>
<td>A node level in Solution Documentation in SAP Solution Manager 7.2.</td>
</tr>
<tr>
<td>Business Scenario</td>
<td>A transaction that documents the activities of the users involved in the change process, for example, consultants, developers, testers, and system administrators. Change documents are generated from an IT requirement or a request for change. Multiple change documents can be associated with one IT requirement or request for change.</td>
</tr>
<tr>
<td>Change document</td>
<td>Offers various possibilities to organize the change management of SAP Solution Manager projects. For managing changes, configurable workflows are offered.</td>
</tr>
<tr>
<td>Change Request Management (ChaRM)</td>
<td>Document that describes an implementation building block. It represents the manual configuration reference of the automated activation content and can be used for initial implementation purposes or as base for customer-specific adjustments and their documentation.</td>
</tr>
<tr>
<td>Change Request Management (ChaRM)</td>
<td>Used to manage documentation assignments at SAP Solution Manager structure elements. The documentation type describes the character of the documentation assignment and, in addition, affects the documentation template as well as further characteristics of the system behavior that are using the specific documentation type.</td>
</tr>
<tr>
<td>Configuration Guide</td>
<td>A tool for configuring the SAP system to meet customer requirements. The Implementation Guide (IMG) explains all the steps in the implementation process, tells you the SAP standard (factory) Customizing settings, and describes the system configuration activities. The hierarchical structure of the IMG is based on the application component hierarchy</td>
</tr>
<tr>
<td>Configuration Guide</td>
<td>Summarizes all content delivered to accelerate the implementation of a Best Practices solution package. Typically, it describes all content assigned to SAP Solution Manager and SAP Solution Builder.</td>
</tr>
<tr>
<td>Documentation Types</td>
<td>A transaction for the IT team to define the solution and effort estimates for the associated business requirements. It can also be used to capture IT specific requirements. Every business requirement created has only one IT requirement associated with it.</td>
</tr>
<tr>
<td>Logical Component</td>
<td>SAP Solution Manager is used as a central system and the technical objects assigned to the structure elements are accessed by RFC connections. The system to be accessed depends on the specific Project Schedule (for example, development, test, training). To collect the different RFC connections for an assignment, Logical Components are used, also containing information about which system type is required on customer side to configure the RFC connection (product, product version, main instance) to access the technical object there. The Logical Component technique is also used to manage the Process Step assignment to the Business Processes.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Managed system</td>
<td>SAP S/4HANA is referred to as the <em>managed</em> system. It is administered by the <em>managing</em> system (SAP Solution Manager 7.2).</td>
</tr>
<tr>
<td>Managing system</td>
<td>SAP Solution Manager 7.2 is referred to as the <em>managing</em> system. It is used to administer the <em>managed</em> system which refers to the SAP S/4HANA system and any other systems in the solution landscape.</td>
</tr>
<tr>
<td>Phase Cycle</td>
<td>Used to control the changes done to the managed system and managing system. For example, moving transport requests across the SAP S/4HANA landscape or updating business process content in SAP Solution Manager 7.2 using change documents.</td>
</tr>
<tr>
<td>Prerequisite Matrix</td>
<td>List of building blocks describing the relation between scope item/business process and assigned building blocks. The list is used to control redundant implementation content assignments in SAP Solution Manager.</td>
</tr>
<tr>
<td>Project</td>
<td>SAP Solution Manager is integrated with the project management functions of SAP Portfolio and Project Management (SAP PPM), so you can manage, for example, project time, resources, and status.</td>
</tr>
<tr>
<td>Quick Guide</td>
<td>The Quick Guide describes the solution package-specific preparation steps required before the Scope Item-specific implementation can be started. The preparation includes all steps for the participating software components, add-ons and further content to be used in the implementation project.</td>
</tr>
<tr>
<td>Request for change</td>
<td>A transaction used to request a change to your solution, for example, an enhancement or change to a function or report.</td>
</tr>
<tr>
<td>Roadmap</td>
<td>Describes tasks relevant for customer implementation projects based on the SAP Activate methodology. Can be specific to one solution and provides the appropriate accelerators. Also referred to as a Work Breakdown Structure.</td>
</tr>
<tr>
<td>SAP Activate</td>
<td>SAP implementation framework for all SAP solutions including methodology, tools for configuration and SAP Best Practices.</td>
</tr>
<tr>
<td>SAP Best Practice Explorer</td>
<td>Web site where all SAP Best Practices content can be viewed and downloaded.</td>
</tr>
<tr>
<td>SAP Best Practices Solution Builder</td>
<td>Referred to in this guide as the SAP Solution Builder. SAP Best Practices-specific tool add-on used to accelerate the configuration tasks during the implementation via guided activation of pre-configuration. Delivered as standard as part of SAP S/4HANA.</td>
</tr>
<tr>
<td>SAP Roadmap Viewer</td>
<td>Web site where all SAP Activate roadmaps can be viewed and downloaded. This includes generic methodology roadmaps and SAP S/4HANA specific roadmaps.</td>
</tr>
<tr>
<td>SAP Solution Manager</td>
<td>SAP standard on-premise tool framework to cover the complete product lifecycle on customer side. This includes the implementation, operation and</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>-----------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Scope item</td>
<td>upgrade.</td>
</tr>
<tr>
<td></td>
<td>Typically a pre-defined business process, such as sales order processing. They represent a Best Practice implementation choice for a customer. Each scope item has a set of accelerators delivering detailed documentation that is used during the implementation project. Scope items require specific building blocks to be implemented.</td>
</tr>
<tr>
<td>Software Download Center (SWDC)</td>
<td>Official SAP download page on SAP Best Practice Explorer and SAP Service Marketplace (SMP) which contains the Best Practices tool and content add-ons required for SAP Solution Manager and SAP Solution Builder.</td>
</tr>
<tr>
<td>Solution</td>
<td>In SAP Solution Manager 7.2, the role of “solution” has changed. The solution documentation including the business process structure, documentation and versions are maintained in the “solution”. Typical customers will have only one solution in SAP Solution Manager, covering the complete life cycle of the entire IT landscape.</td>
</tr>
<tr>
<td>Solution file and installation data</td>
<td>Pre-configured and solution package-specific configuration content which is required for the activation in SAP Best Practices Solution Builder. It consists of the structure (solution file) to be implemented and the pre-configuration (installation data) used for the BC Sets and eCATTS assigned to the solution file, using Scope Items and Building Blocks as structuring elements.</td>
</tr>
<tr>
<td>Test workbench</td>
<td>A SAP standard tool to manage test plans, test cases and test analysis. The SAP Solution Manager Test Workbench integration allows to use the blueprint structure as a source for test plan generation (using transactions or test case assignments as test cases).</td>
</tr>
<tr>
<td>Transport request</td>
<td>An SAP transport is a package which is used to transfer data from one SAP installation to another. This data can range from an individual configuration settings to a whole SAP client. Transport requests are associated with SAP Solution Manager change documents.</td>
</tr>
<tr>
<td>Work Breakdown Structure (WBS)</td>
<td>Describes tasks relevant for customer implementation projects based on the SAP Activate methodology. Can be specific to one solution and provides the appropriate accelerators. Also referred to as a roadmap.</td>
</tr>
</tbody>
</table>
2. Discover

The Discovery phase covers all the activities undertaken before the SAP S/4HANA implementation project is formally initiated. This section covers tasks related to SAP Best Practices and SAP Solution Manager 7.2:

- Access to SAP S/4HANA and SAP Solution Manager 7.2 trial systems
- Access SAP Best Practices documentation
- Understand SAP Best Practices accelerators
- Review S/4HANA roadmaps in the Roadmap Viewer
- Decide whether to use the SAP S/4HANA Software Appliance

2.1. Access to SAP S/4HANA and SAP Solution Manager 7.2 trial systems

The following online trial systems are available to customers before they have an SAP software license or cloud subscription. SAP does not charge for the trials but there is a third party hosting charge. Refer to the blogs in the table below for more information. You can pay to extend the duration of the trials.

<table>
<thead>
<tr>
<th>Online Trial</th>
<th>Duration</th>
<th>Links</th>
<th>Blog</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP S/4HANA on-premise</td>
<td>30 days</td>
<td><a href="http://www.sap.com/s4hana-trial">http://www.sap.com/s4hana-trial</a></td>
<td>Blog</td>
</tr>
<tr>
<td>SAP S/4HANA cloud</td>
<td>14 days</td>
<td><a href="http://www.sap.com/s4hana-trial">http://www.sap.com/s4hana-trial</a></td>
<td></td>
</tr>
<tr>
<td>SAP Solution Manager 7.2</td>
<td>90 days</td>
<td><a href="http://cal.sap.com">http://cal.sap.com</a></td>
<td>Blog</td>
</tr>
</tbody>
</table>

The trials are offered through the SAP Cloud Appliance Library (CAL). See screen shot below. Currently, the trial solution is transferred to and hosted in Amazon Web Services (AWS). You need a CAL and AWS account. Technically, the trial consists of multiple instances e.g., SAP S/4HANA (the core ABAP backend) and SAP NW JAVA instance.
The SAP S/4HANA trials allow you to experience the new application look and feel and run through SAP Best Practices standard end-to-end business processes e.g. order-to-cash and procure-to-pay. Your user account also allows you to adapt some of the configuration. The trial solution can be used to assist scoping decisions during the Discover phase.

The SAP Solution Manager 7.2 trial allows you to explore and evaluate the software and try new features. You can load and activate your own solutions. Existing SAP customers, can understand how to move from SAP Solution Manager 7.1 to 7.2. The process of transferring solution documentation from 7.1 to the new solution documentation in 7.2 is called content activation. It is possible to test and evaluate content activation with solutions from your existing Solution Manager system.

2.2. Access SAP Best Practices documentation

It is possible to access most SAP Best Practice content free of charge online. You can use the SAP Best Practices Explorer which replaced the SAP Service Marketplace Best Practices page in 2016. It is available at https://rapid.sap.com/bp.

You can browse packages via a catalog and an A-Z index. You can access individual accelerator files and if you are an SAP customer and have an s-user account, it is possible to download all the content in a zip file.
Implement SAP S/4HANA on-premise with SAP Best Practices - Reference Guide

See a recorded demo that includes use of the SAP Best Practices Explorer.

Information is also still available in the SAP Service Marketplace https://service.sap.com/public/solutionpackages. See a recorded demo showing how the Service Marketplace is used.

2.3. Understand SAP Best Practices accelerators

As stated in the chapter SAP Best Practices for S/4HANA, SAP Best Practices content exists at package, scope item and building block level. Although packages vary, the following accelerators are generally provided at the package level:

- **Package fact sheet**: a summary of the business scope and main technical characteristics of the S/4HANA package.
- **Software and delivery requirements**: a document that provides all the requirements that must be in place for an on-premise solution deployment to start. These requirements include those for systems, content, and tools.
- **Prerequisites matrix**: a spreadsheet showing the implementation sequence of building block configuration guides for each scope item.
- **Content library**: a web page that links to all of the documentation for the solution. You can filter by scope items or a group of scope items to display associated building block configuration guides.
- **Administration guide for S/4HANA**: a guide that explains the administrative tasks that enable the implementation team to prepare the solution.
- **Master data overview**: describes the sample master data included with the solution. Examples include materials, customers and suppliers ready to be used in the different process scenarios.
- Organizational data overview: summary of the organization model data shipped with the package. The organization model is country specific. Examples include a company code with a related chart of accounts, plants and sales areas.
- SAP Best Practices SAP note: created for on-premise packages, this note provides information about the activation and implementation of SAP Best Practices. A link to the note is available in the content library.
- Delivery supplement: presentation with additional implementation information.

Accelerators available at the scope item level:
- Scope item fact sheet: scope description of each scope item / business process.
- Process diagram: a graphical representation of the steps in a scope item / business process executed by various roles.
- Test script: business process documentation that provides scripted scenarios that may be used to create test scripts for your implementation. These can be used by users new to SAP S/4HANA to walk through the business processes.

Accelerators available at the building block level:
- Building block factsheet: scope description of each building block.
- Activation content: content used by SAP Best Practices Solution Builder to automate the configuration.
- Configuration guide: each building block has a detailed configuration guide to describe the settings of the underlying applications. These can be used to undertake the configuration manually in an on-premise solution. You can update these to produce documentation of the implemented solution.

2.4. **Review S/4HANA roadmaps in the roadmap viewer**

As stated in the chapter Implementation Methodology / Roadmap, the SAP S/4HANA specific methodology is called a roadmap and is available online using the roadmap viewer. SAP regularly updates the S/4HANA roadmap content and accelerators.

You can navigate through the roadmap by project phase or project work stream. See screen shot below. Accelerators are available as hyperlinks. Some accelerators are only available to SAP employees and this is indicated in brackets after the accelerator name.

You can view links to all the accelerators by using the accelerators link in the top right of the roadmap. Accelerators may be generic e.g. open issues template or solution specific e.g. administration guide for SAP S/4HANA on-premise.
For on-premise implementations, an XML version of the S/4HANA roadmap can be accessed and uploaded into your SAP Solution Manager 7.2 instance. Use the Download Project Plan link below.

For cloud implementations, SAP Solution Manager 7.2 is typically not used. For this reason, an editable version of the roadmap is available as an Excel from the same link.

2.5. Decide whether to use the SAP S/4HANA software appliance

The S/4 HANA trial system for the on-premise version of SAP S/4HANA (Enterprise Management) is based on an SAP Best Practices pre-configured software appliance. This appliance is also available to you on Blu-Ray disc.

It allows you to jump start the system setup of your on-premise project with a system with software pre-installed and SAP Best Practices pre-activated. If the software appliance is not used, the S/4HANA software is installed in the normal way and SAP Best Practices are activated using the SAP Solution Builder.
There are three use cases for the appliance:

- trial system (as described in previous chapter).
- sandbox / proof of concept.
- setup of the development landscape.

The appliance provides multiple ABAP clients (see picture below) e.g., a reference client with all content activated and a ready-to-activate client with no client-specific configuration. The ready-to-activate client is used in the third use case to set up a development landscape. In this case, SAP Best Practices Solution Builder is used to automate the activation in the development system. The appliance sets boundary conditions that may mean that it cannot be used to set up a development system.

### SAP Best Practices: What ABAP client is used for what?

<table>
<thead>
<tr>
<th>ABAP Client</th>
<th>Description</th>
<th>Mainly suited for...</th>
</tr>
</thead>
</table>
| **100 Exploration client**   | - Pre-activated Best Practices configuration & sample master data (Germany, USA)*, SAP Fiori applications  
                              | - Additional configuration for end-to-end sample business process**  
                              | - Transactional data in company code for Germany                      | **USE CASE 1: Exploration**                          |
| **200 SAP BW client**        | - Pre-activated content for SAP Integrated Business Planning (IBP) for Finance | **All scenarios that use IBP for Finance** |
| **300 Best Practices reference client** | - Pre-activated Best Practices configuration & sample master data (Germany, USA)* | **USE CASE 2: Sandbox & proof-of-concept** |
| **400 Ready-to-Activate client** | - Technical preparation activities prior to Best Practices content activation | **USE CASE 3: Development landscape (see boundary conditions mentioned earlier)** |

(*) Integration with SAP Ariba, SAP Financial Services Network & SAP BI platform not included but can be configured by customer / partner.

**Processess localized with sample master & transactional data for Germany:** US localization requires customer-specific theme integration and comes without transactional data.

The key benefit of the appliance is to save time at the beginning of the project. You can find more detailed information, including boundary conditions, in this presentation.
3. Prepare

The prepare phase provides the initial planning and preparation for the project. In this phase, the project is started, plans are finalized, the project team is assigned, and work is initiated. For more details, refer to the Transition to S/4HANA roadmap published here.

In the prepare phase, the focus is on the activation of SAP Best Practices configuration content. The discussion, design and implementation of custom adaptations is undertaken in later phases.

3.1. Activities undertaken

The table below provides a summary of the activities undertaken during the prepare phase. Each set of activities has a sub-section in this chapter of the reference guide. They are organized into a workable implementation sequence.

<table>
<thead>
<tr>
<th>Prepare Activities</th>
<th>Systems Involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define and setup system landscape (managed and managing system)</td>
<td>SAP Solution Manager 7.2 , SAP S/4HANA</td>
</tr>
<tr>
<td>Choose SAP Best Practices packages and activation approach</td>
<td>SAP Best Practices Explorer, SAP Solution Manager 7.2, SAP S/4HANA</td>
</tr>
<tr>
<td>Consider and clarify whether multiple SAP Best Practices packages will be used</td>
<td>SAP Best Practices Explorer, SAP Solution Manager 7.2, SAP S/4HANA</td>
</tr>
<tr>
<td>Create solution</td>
<td>SAP Solution Manager 7.2</td>
</tr>
<tr>
<td>Decide whether a template solution will be used</td>
<td>SAP Solution Manager 7.2</td>
</tr>
<tr>
<td>Setup requirement management or Change Request Management (ChaRM)</td>
<td>SAP Solution Manager 7.2</td>
</tr>
<tr>
<td>Using requirements management to control changes</td>
<td>SAP Solution Manager 7.2</td>
</tr>
<tr>
<td>Using request for change to control changes</td>
<td>SAP Solution Manager 7.2</td>
</tr>
<tr>
<td>Create project for project management</td>
<td>SAP Solution Manager 7.2</td>
</tr>
<tr>
<td>Activate SAP Best Practices configuration in SAP S/4HANA using Software Appliance</td>
<td>SAP Solution Builder, SAP S/4HANA</td>
</tr>
<tr>
<td>Activate SAP Best Practices configuration in SAP S/4HANA using SAP Solution Builder</td>
<td>SAP Solution Builder, SAP S/4HANA</td>
</tr>
<tr>
<td>Import SAP Best Practices content into SAP Solution Manager 7.2</td>
<td>SAP Solution Manager 7.2</td>
</tr>
<tr>
<td>Importing multiple SAP Best Practices into SAP Solution Manager 7.2</td>
<td>SAP Solution Manager 7.2</td>
</tr>
<tr>
<td>Align scope with activated SAP Best Practices and complete the process alignment with the customer's business processes.</td>
<td>SAP Solution Manager 7.2</td>
</tr>
</tbody>
</table>
Prepare Activities | Systems Involved
---|---
Test activation of SAP Best Practices configuration content in SAP S/4HANA | SAP S/4HANA, SAP Solution Manager 7.2 (optional)
Working with SAP Solution Manager 7.0 or 7.1 Content | SAP Solution Manager 7.2

### 3.2. Tools and concept for implementation support

The diagram below shows all the tools and functionality used for the implementation of SAP S/4HANA with SAP Best Practices and SAP Activate.

SAP Solution Builder enables the quick activation of the complete SAP Best Practices package, or a few selected SAP Best Practices scope items via a guided step-by-step process.

SAP Solution Manager 7.2 provides a central point of access for a variety of essential project support functions. This reference guide will explain the functionality below in detail:

- Process management
- Project management
- Requirement management involving IT requirements and business requirements
- Change control management including deployment execution
- Test management excluding test execution
- Release management

### 3.3. SAP Solution Manager 7.2 Launch Pad

In SAP Solution Manager 7.2, SAP has provided a new user experience and has delivered a simpler role-based user interface. The SAP Solution Manager 7.2 Fiori Launch Pad is the starting point for accessing the functionality within SAP Solution Manager 7.2. It is a Fiori application and is accessed via the transaction code SOLMAN_WORKCENTER or SM_WORKCENTER or directly from the user menu by clicking on Solution Manager: Work Centers URL.
Implement SAP S/4HANA on-premise with SAP Best Practices - Reference Guide

The initial screen of the SAP Solution Manager 7.2 Fiori Launchpad is shown below. It is possible to customize the screen to meet your individual requirements. Click on the pencil icon highlighted below to customize the screen. The URL can be saved as a favorite and the Fiori application can be launched from the user desktop.

Note: The availability of different tabs is dependent on the authorization roles assigned to the user.

3.4. Define and setup system landscape

This section covers the definition of system landscape:
- SAP S/4HANA (Managed System)
- Setup SAP Transport Management System (TMS)
- SAP Solution Manager 7.2 (Managing System)
- Connect Managed Systems to the Managing System

### 3.4.1. SAP S/4HANA (Managed System)

SAP Solution Manager 7.2 is referred to as the managing system. It is used to administer the managed system, which, in this guide, refers to the SAP S/4HANA system and any other systems in the solution landscape. The technical information about the managed system is stored in the landscape management database (LMDB) of SAP Solution Manager 7.2. The picture below shows the standard 3-tier landscape used for an on-premise SAP S/4HANA implementation.

- Sandbox: is an optional system, for the initial validation of the imported SAP Best Practices package.
- Development: the system for the implementation of the SAP Best Practices and the customizations.
- Quality Assurance: the system for the testing and validation of the implemented SAP Best Practices and customer adaptations.
- Production: the system for the end users, containing the finalized customizations and developments.

To move the transport requests across the SAP S/4HANA system landscape, complete the Transport Management System setup. This is detailed in the next section.

The SAP Best Practices content (customization) is delivered with the SAP S/4HANA software but must be activated. SAP Solution Builder can be used to activate the SAP Best Practices in the S/4HANA development or/and sandbox systems.

A sandbox system can be used during the initial stages of the SAP S/4HANA implementation. It can be used to:
- Help select which SAP Best Practices scope items to activate during prepare phase.
- As a show and tell system during the workshops.
- To try configuration and developments before implementing these in the SAP S/4HANA development system.
Alternatively, you can use the development system for these activities. Hence, while defining the system landscape for SAP S/4HANA, you should decide if you need a sandbox system or not.

3.4.2. Setup SAP Transport Management System (TMS)

The Transport Management System (TMS) is required to model and manage the system landscape. It provides tools for configuring the system landscape as well as for organizing, performing and monitoring transports between SAP systems.

Setup of the TMS for the S/4HANA systems involves the following steps:

- Identify the transport domain controller.
- Create the transport domain.
- Add the systems to the domain controller.
- Create the transport routes between the DEV, QAS and PROD of the S/4HANA system landscape.
- Distribute the TMS changes across the S/4HANA systems in the landscape.

More information about SAP Transport Management System setup can be found [here](#).

All the SAP S/4HANA systems may not be available at the start of the project. The TMS allows the definition of placeholders, or virtual systems. In this way, the complete system landscape can be modelled and the settings can be maintained in the TMS of the available system. The virtual system is replaced once the real system is available.

3.4.3. SAP Solution Manager 7.2 (Managing system)

SAP Solution Manager 7.2 is referred as the managing system in the landscape. The landscape for SAP Solution Manager 7.2 can be 2-tier or 3-tier. It is not recommended to have only one SAP Solution Manager 7.2 system in the landscape.

The 2-tier landscape is as below:

- Development: the system for the implementation and testing of the functionalities like Change Request Management, requirements management. The development system is used by the SAP Solution Manager administrators and not by the project team members.
- Production: connected to the managed systems landscape (SAP S/4HANA – development, quality assurance and production systems). Project team members do all their work in the production instance of SAP Solution Manager 7.2.

The 3-tier landscape is as below:

- Development: the system for implementation of the functionalities like Change Request Management and requirements management. The development system is used by the SAP Solution Manager administrators and not by the project team members.
- Quality Assurance: the system for testing the implemented functionality and can be connected to the development and quality assurance systems of the managed environment for monitoring.
• Production: connected to the managed systems landscape (SAP S/4HANA – development, quality assurance and production systems) and is used by the end users. Project team members do all their work in the production instance of SAP Solution Manager 7.2.

3.4.4. Connect managed systems to the managing system
SAP Solution Manager 7.2 provides functionality to support the implementation of SAP S/4HANA using SAP Best Practices. To do so, it is important to connect the managed systems to SAP Solution Manager 7.2 production instance.

A prerequisite for connecting these managed systems is to define them in the System Landscape Directory, commonly referred to as SLD. The SLD stores technical system information for all registered managed systems. It is the central source of system landscape information for the management of the software lifecycle.

There are two ways for defining the SLD:
• Option 1: the local SLD within SAP Solution Manager can be used as the central SLD for the landscape.
• Option 2: the remote decentralized SLD can be used as central SLD and SAP Solution Manager can be updated with its data (optionally via the local SAP Solution Manager SLD).

The data from the SAP S/4HANA system is pushed to the SLD using the transaction RZ70 for the ABAP stack and using Visual Administrator for the JAVA stack. The technical information of the managed system is stored in the Landscape Management Database (LMDB) of SAP Solution Manager 7.2. The data from the SLD is synchronized with the LMDB of SAP Solution Manager 7.2. Multiple variants exists for achieving the synchronization between SLD and LMDB. Further details on the variants can be found here.

The recommended variant for SLD to LMDB integration is shown below.

3.5. Choose SAP Best Practices packages and activation approach
SAP Best Practices packages accelerate an implementation by providing pre-configured solutions and documentation. A few of the advantages of SAP Best Practices are listed below:
• A faster solution design is possible.
• Guidance on the latest innovations can help to reduce uncertainty.
• Configuration settings support the faster setup of the software.
• Many assets can be edited or used as templates to provide documentation for your project.

You must decide which SAP Best Practices to use and the scope must be finalized at the start of prepare phase. Documentation on the different SAP Best Practices available for SAP S/4HANA can be found here.

The reference guide focuses on the new implementation of SAP Best Practices for SAP S/4HANA on-premise. The SAP Best Practices for SAP S/4HANA can be activated in the development system using:

• S/4HANA Software Appliance and/or
• SAP Solution Builder

The approach is usually finalized in the Discover phase.

Note: You can also configure the SAP Best Practices in SAP S/4HANA manually using the IMG links in SAP Solution Manager 7.2. However, this approach is not recommended for new implementations.

The points listed below have an impact on the duration, effort and resources involved in the SAP S/4HANA implementation. They should be discussed and finalized in the prepare phase.

• System landscape requirements.
• Hardware sizing based on the business requirements.
• Whether one or multiple SAP Best Practices will be used. If multiple SAP Best Practices are to be activated, the compatibility between them should be checked. See later section.
• Approach to customer specific developments to extend the SAP Best Practices.
• Whether Focus Build services will be used in SAP Solution Manager 7.1 (or 7.2).

Note: SAP provides out-of-the-box, and integrated, tool-supported methodology to manage requirements and software development in Focused Build services. You can find more information here.

3.6. Consider and clarify multi-package approach

Ignore this chapter if you are using one SAP S/4HANA Best Practice package. However, you may want to activate more than one SAP Best Practices in SAP S/4HANA. For example, a customer with subsidiaries in Germany and USA may choose to use the SAP Best Practices packages for Germany and USA. You may have a multi-country implementation and/or a multi-system environment. Hence, you would need two or more different SAP Best Practices.

You should check the following before finalizing the SAP Best Practices to be implemented:

• Compatibility between the different SAP Best Practices across landscape.
• Availability of the SAP Best Practices in SAP Solution Manager 7.2 for process documentation.

Two variants should be considered when implementing multiple SAP Best Practices:

• SAP Best Practices with no overlap of structure and implementation content
• SAP Best Practices with overlap of structure and/or implementation content
It is important to analyze the compatibility and overlap between the SAP Best Practices in detail. The analysis helps to:

- Investigate the overall compatibility of the different solution packages.
- Define the activation sequence of the SAP Best Practices configuration content in SAP S/4HANA using SAP Solution Builder.
- Model the merged business process structure in SAP Solution Manager 7.2.
- Analyze the impact on time and effort required for the activation of multiple SAP Best Practices configuration content.

The table below gives an overview of the different scenarios:

<table>
<thead>
<tr>
<th>Multiple Package Scenario</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent SAP Best Practices</td>
<td>SAP Best Practices content does not overlap. For example, implementation of the SAP Best Practices for SAP S/4HANA and SAP SuccessFactors. Impact:</td>
</tr>
<tr>
<td></td>
<td>• SAP Solution Builder: no impact on the activation.</td>
</tr>
<tr>
<td></td>
<td>• SAP Solution Manager 7.2: no impact on the import of SAP Best Practices but customer-specific modeling alignment is recommended.</td>
</tr>
<tr>
<td>SAP Best Practices with Overlap</td>
<td>The selected SAP Best Practices content overlap with each other. For example, implementation of different country versions of the same SAP Best Practices. Impact:</td>
</tr>
<tr>
<td></td>
<td>• SAP Solution Builder: the activation sequence is impacted. The main SAP Best Practices is activated first followed by the second SAP Best Practices. SAP Solution Builder ensures that only the delta content from the second SAP Best Practices is activated in the SAP S/4HANA system.</td>
</tr>
<tr>
<td></td>
<td>• SAP Solution Manager 7.2: impact on the import of SAP Best Practices as the content common to the multiple SAP Best Practices is not imported again. Any customer adaptations done prior to the second import of common objects are kept. Customer-specific modeling alignment is recommended.</td>
</tr>
</tbody>
</table>
Multiple Package Scenario | Description
--- | ---
Combination | A combination of the two scenarios above.

When implementing multiple SAP Best Practices, the customer should consider two factors:

- Impact on the managing system (applicable if SAP Solution Manager 7.2 is used).
- Impact on the managed system (S/4HANA system) including SAP Solution Builder.

### 3.6.1. Impact on SAP Solution Manager 7.2 (managing system)

The implementation of multiple SAP Best Practices has an impact on the project planning, effort estimation and business process structures in SAP Solution Manager 7.2. The business process structure and process models (also referred as process diagrams) will need to be restructured to handle the overlaps between the SAP Best Practices and reflect the customer-specific business scenarios.

### 3.6.2. Impact on SAP S/4HANA (managed system)

Implementation of multiple SAP Best Practices has a definite impact on the managed system. Unless, the SAP Best Practices for SAP S/4HANA are compatible with each other, it is not possible to proceed with the activation of them all in the normal way.

You will generally choose the latest release of the SAP S/4HANA Best Practice package. For example, you would not combine SAP S/4HANA on-premise USA release 1511 and release 1610 together because 1511 contains an older version of the content in 1610. You might, however, use 1610 USA and 1610 Germany together. You might also combine the package for SAP S/4HANA on-premise with the package for Analytics for SAP S/4HANA. If the packages are not compatible you must make choices on how to proceed. You might implement one package at software version 1, then upgrade to software version 2 and implement the second package. More commonly you will use the written documentation from the smaller package to help you do the configuration manually without SAP Solution Builder.

There are two types of compatibility check:

- Base compatibility: involving the comparison of the product, product version, country and industry between the SAP Best Practices.
- Advanced compatibility: involving comparison of the configuration values.

SAP highly recommends completing the base compatibility of the selected SAP Best Practices packages very early to avoid disruptions at the start of the implementation project. Based on the compatibility results, the main SAP Best Practices package is implemented first, followed by the rest of the SAP Best Practices. The diagram below demonstrates the implementation:
3.6.2.1. Base compatibility checks

A base compatibility check involves comparing the software products version required for the activation of the different SAP Best Practices configuration content. The steps are explained below:


All the SAP Best Practices for SAP S/4HANA are displayed.
Click on the solution package name. For example, click on the line item for SAP Best Practices for SAP S/4HANA (on premise). This gives further information on the selected SAP Best Practices.

Navigate to the tab Accelerators and click on the hyperlink for Software and Delivery Requirement. Compare the software product versions listed in this document for each of the SAP Best Practices you need to check. If the software product versions match, you can proceed with the advanced compatibility checks. This is explained in the next chapter. If the SAP Best Practices are not compatible in terms of software product versions, you have to make a choice. You can consider upgrading the lower software version.
3.6.2.2. **Advanced compatibility checks**

The advanced compatibility check involves a detailed analysis of the configuration settings within multiple SAP Best Practices. It must be done prior to the activation of the SAP Best Practices in the SAP S/4HANA using SAP Solution Builder. You should use the prerequisite matrix provided with the SAP Best Practices package.

To access the prerequisite matrix, navigate to the same **Accelerators** page shown above and click on the hyperlink for **Prerequisites matrix**.

A sample of the prerequisite matrix is shown below. The rows are scope items within the SAP Best Practices package. The columns are the building blocks that each scope item requires and the sequence they should be implemented in. Once you have implemented a building block in the one row you can ignore it in all subsequent rows.
You should compare the prerequisite matrix for each SAP Best Practices package and identify overlaps, by looking for the common scope items and building blocks in the SAP Best Practices. Overlaps are usually OK and are treated in SAP Solution Builder as stated above. If building blocks in two different packages appear to cover a similar configuration area e.g. sales document types, you should open the individual configuration documents and check for clashes in the configuration settings. If there are clashes, these will have to be reworked by undertaking manual configuration.

The prerequisite matrix and configuration should also be reviewed in detail when your implementation is being undertaken in an existing system with active configuration.

The implementation of multiple SAP Best Practices in SAP S/4HANA also requires some work on sequencing in SAP Solution Builder. There is more detail in chapter Implementation of multiple SAP Best Practices.

3.7. Create solution

In SAP Solution Manager 7.1, the business process structure and relevant documentation were maintained in a “project”. After the implementation go-live, the content from the “project” was pushed into a “solution” for maintenance and monitoring.

In SAP Solution Manager 7.2, the role of “solution” has changed. The solution documentation including the business process structure, documentation and versions are maintained in the “solution”. Typical customers will have only one solution in SAP Solution Manager, covering the complete life cycle of the entire IT landscape. A “project” in SAP Solution Manager 7.2 is exclusively used for project management.

The main components of a solution in SAP Solution Manager 7.2 are:

- Branch
- Logical component group and logical components
- Solution documentation

3.7.1. Branch

A branch represents a version of the solution documentation containing processes, libraries, applications, and systems. It offers a staging area for the “to-be” business processes, which can be used for early business process design as well as for implementation projects. When creating a solution, two branches are created by default: production branch and maintenance branch.

The production branch only contains productive documentation and is protected against any direct changes, while the maintenance branch offers a version of productive documentation in a staging area for maintenance. The content from the maintenance branch is then released to the production branch and is made available for all.

It is possible to create further branches. For larger projects, like the transition to SAP S/4HANA, SAP recommends the creation of a development branch, a design branch, and an import branch in the solution. The different branches and their relationships are shown below:
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Note: The design and development branch, provide a demarcation between blueprinting and implementation of the solution. During prepare and explore phase of the implementation, the design branch is used to document the to-be business process structure. At the start of the realize phase, this finalized to-be business process structure is released into the development branch. You will use the development branch exclusively for the development and configuration. If you decide not to use the design branch, the definition of the to-be business process structure is done in the development branch of the solution.

Tip: In the reference guide, we have used the import and development branches in the solution.

Note: Any changes in the parent branch are visible in the child branches as soon as the changes are complete. However, to make the changes in the child branch available in the parent branch, you must release the changes.

3.7.2. Logical component group and logical components
A logical component group is a high level view of an application. It is a group of logical components which contain systems of similar kind e.g. all the systems of type S/4HANA belong to one logical component group. Similarly different logical component groups would be created for systems of type ERP, CRM or Portal. A logical component refers to the concrete technical systems of a system track. They typically belong to the same transport landscape and have the same product version. The logical components are created within the logical component groups. The technical systems assigned to logical components are classified according to their system role e.g. development system or quality assurance system. The logical component group architecture is shown below:
In SAP Solution Manager 7.2, logical component group and logical components are solution specific. They are created within the system landscape of the solution.

**Tip:** To summarize, logical component groups are defined for the solution. Logical components and the related technical systems are created at the branch within the solution. The technical systems, defined in the logical component, belong to the same transport track in TMS.

### 3.7.3. Solution documentation

Solution documentation comprises of solution documentation content managed within a business process hierarchy. Solution documentation content includes all artefacts, documents, diagrams, executables and test cases which are created to describe one or more aspects of the solution.

Creating a solution is a prerequisite for using SAP Solution Manager 7.2 for the new implementation of SAP S/4HANA with SAP Best Practices. The solution and all the branches are created in the production instance of SAP Solution Manager 7.2.

A demo for the creation of solution in SAP Solution Manager 7.2 can be found [here](#).

To create a Solution, navigate to *Project and Process Management* in the work center and select the tile *Solution Administration*.
To create logical component group, click on **Maintain Logical Component Groups** in the tab **System Landscape** of the solution. To create the logical components and assign the technical system, click on **Assign Technical Systems**. This is highlighted in the screenshot below:

**Note:** The logical component assigned to a branch can be reused across other branches within the solution. For example, the logical component defined for maintenance branch can be reused for the development branch. However, logical component groups and logical components cannot be reused across different solutions.
3.7.4. **Solution library**

In SAP Solution Manager 7.2, a new concept called the solution library has been introduced. Libraries contain the technical objects involved in the business processes and are structured according to the elements they manage, for example, process steps, executables, interfaces, developments, configuration units and alerts.

The content is originally defined within the library and referenced in the business processes. A process step within the library can be referenced multiple times in different business processes within the solution. The diagram below illustrates the library concept.

In the process step within the solution, it is possible to maintain process related data (e.g. specific name for specific process assignment). This data is not available in the library. This feature can be used when the same basic process step is used in multiple business processes but with variations in the process data.

When the SAP Best Practices are imported, process steps, executables and configuration building blocks are placed into the solution library.

3.7.5. **Multi-language support in Solution**

SAP Solution Manager 7.2 allows the end user to choose the language for solution documentation content.

In the SAP Solution Manager 7.2 Fiori Launch Pad, navigate to the tile **Solution Administration in Project and Process Administration**. Select the solution and then the tab **Properties**. Click on **Edit** and maintain the content languages required for the end user.
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Note: The menu and elements within SAP screens are defined by the logon language set by the user when logging into the SAP system.

In solution documentation, you get the option to select the content language as shown below:

Note: If content elements exist in the selected language, they are shown. If the element is not available in the selected language, a fallback (default) is used e.g. English.
3.8. Implement template management

Ignore this chapter if you do not plan to use a template implementation approach. You may have multiple subsidiaries located in different geographical locations. In such scenarios, you may have multiple production systems. Even though the different locations have the same kind of system e.g. SAP S/4HANA, the local instances may be different and will have country or region-specific configurations and developments.

In such scenarios, a global template is built for the common business scenarios and rolled out to the different regions. This template is then modified based on regional requirements at the local instances. SAP Solution Manager 7.2 supports this scenario with the concept of sites.

A site classifies systems according to locations, entities, or any other named spots they belong to. It is used as a system landscape selector that reduces the systems to only those relevant for the selected site. It is possible to classify the systems and the relevant solution documentation based on the sites.

To define sites, go to the tile Solution Administration in Project and Process Management of SAP Solution Manager 7.2 Fiori Launch Pad and select the tab Properties for the required solution. Enable the property Landscape with Sites.

![Solution Administration](image)

In the tab Branches, edit the Properties of the branch selected and enable Branch with Sites.
Define the site specific logical component group in the tab System Landscape of solution administration. These logical component group can be used in the solution documentation.

In solution documentation, you can view the sites as below:

![Image of solution administration interface]

**Note:** The logical component name can be a combination of the branch name and site to which it is assigned. There is often just one site e.g. global.

Another way of handling template management is to create different branches within the solution, with each branch referring to the specific geographical region. The region specific business process structure and the relevant solution documentation is created within a folder in the respective regional branch. The business process structure common across the regions is defined within a folder in a separate branch.

In the production branch, there would be multiple folders, with each folder containing the region specific and common business process structure and solution documentation. The regional team would work on their branches and then push this data to the production branch.

**Note:** To adapt the content common across all regions at region-specific branches, it is recommended to first make a copy the folder. However, any change to the common content (in the parent branch) is not available in the adapted folders in the region-specific branches.
In the diagram below, Development_1 and Maintenance_1 are the development and maintenance branches of region 1 (for example US). The region specific developments and maintenance are done in the branches and pushed to the production branch. However, once the changes are pushed to the production branch, the region specific folder will be available for all the branches. Access to the folders is restricted via roles and authorizations.

3.9. Control of changes in your project

In SAP S/4HANA implementation based on SAP Best Practices, you do the configuration and development changes in SAP S/4HANA system and solution documentation changes in SAP Solution Manager 7.2. In the prepare phase, the two key activities, involving changes are:

1. Activation of the SAP Best Practices in the SAP S/4HANA development system using SAP Solution Builder. This is captured in transport requests in SAP S/4HANA, which are then moved across to the production system.

2. Import of the correspondent SAP Best Practices content into SAP Solution Manager 7.2. This is followed by the scope alignment with the SAP Best Practices in SAP Solution Builder and process alignment with the customer’s business in the import branch of the solution.

Later, in the realize phase, you will implement changes in your SAP S/4HANA system landscape and SAP Solution Manager 7.2 to fulfill new requirements and gaps. SAP Solution Manager 7.2 should be used to manage the entire SAP S/4HANA project lifecycle to provide the benefits described earlier.

Requirements management and Change Request Management (ChaRM) are two entry points to support the SAP S/4HANA project lifecycle. The characteristics of the two approaches are shown in the table below.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Requirements Management</th>
<th>Change Request Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use case</td>
<td>Innovation through implementation activities up to the go live</td>
<td>Operation, through maintenance activities after the go live</td>
</tr>
<tr>
<td>Users</td>
<td>Project team member</td>
<td>IT administration member / Operations team members</td>
</tr>
<tr>
<td>Business Requirement</td>
<td>Applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>IT Requirement</td>
<td>Applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Characteristic</td>
<td>Requirements Management</td>
<td>Change Request Management</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Request for change</td>
<td>Not applicable</td>
<td>Applicable</td>
</tr>
<tr>
<td>Change Document</td>
<td>Applicable</td>
<td>Applicable</td>
</tr>
<tr>
<td>Change Cycle</td>
<td>Applicable</td>
<td>Applicable</td>
</tr>
<tr>
<td>Link with project task</td>
<td>Optional</td>
<td>Optional</td>
</tr>
<tr>
<td>Link with transport Request Management</td>
<td>Optional</td>
<td>Optional</td>
</tr>
<tr>
<td>Release Management</td>
<td>Optional</td>
<td>Optional</td>
</tr>
</tbody>
</table>

The list below provides definitions of the entities used in requirements management and Change Request Management:

- **Business Requirement**: a document for the business to capture their requirements e.g. requirements from the explore phase workshops. They are handed over to the IT team for further action.

- **IT Requirement**: a transaction for the IT team to define the solution and effort estimates for the associated business requirements. It can also be used to capture IT specific requirements. Every business requirement created has only one IT requirement associated with it.

- **Request for Change**: a transaction used to request a change to your solution, for example, an enhancement or change to a function or report.

- **Change document**: a transaction that documents the activities of the users involved in the change process, for example, consultants, developers, testers, and system administrators. Change documents are generated from an IT requirement or a request for change. Multiple change documents can be associated with one IT requirement or request for change. For example, an IT requirement created for the business process “Order to Cash” can be realized with multiple configurations and developments. You can create one change document and multiple transport requests to support the realization. Or create multiple change documents corresponding to each of the configuration and development within the same IT requirement.

- **Change cycle**: used to control the changes done to the managed system and managing system. For example, moving transport requests across the SAP S/4HANA landscape or updating business process content in SAP Solution Manager 7.2 using change documents. The IT requirement, request for change and change documents are all associated with one change cycle.

- **PPM Project**: SAP Solution Manager is integrated with the project management functions of SAP Portfolio and Project Management (SAP PPM), so you can manage, for example, project time, resources, and status.

- **Project Task**: represents an activity associated with the PPM project and helps to link the request for change, change documents, IT requirements and business requirements with the PPM project. Only one transaction (IT requirement, Business requirement, request for change, change document) can be assigned to the project task.

The process flow for requirements management and Change Request Management is shown in the diagram below:
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Note: You should assign the IT requirement, business requirement, request for change and change documents to the impacted business process structure in solution documentation. You should also ensure the assignment of all the relevant documents such as functional design, technical design, test scripts and configuration guides to the IT requirement/Request for change and change documents. This is detailed in the `explore chapter`.

The recommended approach before the go-live is shown in the diagram below. The diagram also shows the relationships between the objects in the managing system and the managed system:
Note: You can assign multiple PPM project to one solution.

Note: It is not mandatory to use business requirements in requirements management. You can create an IT requirement directly in SAP Solution Manager 7.2 and define the type of change documents to be used. Alternatively, you can create change documents directly without an IT requirement. However, the latter is not a recommended approach. In addition, the assignment of the IT requirements and change documents to a PPM project task is optional and only provides project tracking and reporting.

SAP recommends using SAP Solution Manager 7.2 to manage all the changes involved in SAP S/4HANA implementation based on SAP Best Practices. The changes can include configurations and new developments in SAP S/4HANA system landscape, modifications to the existing solution documentation and definition of the new business process structure in SAP Solution Manager 7.2.

The following sections will show you how to set up and use requirements management and Change Request Management during your implementation.

### 3.9.1. Change control landscapes

You might have multiple logical component groups, defined in the solution and not all require change control enablement. In such scenarios, logical component groups are assigned to the change control landscape of the solution. Here, you can choose which logical component groups should be change control enabled.

To create a change control landscape, navigate to the solution via the SAP Solution Manager 7.2 Fiori Launch Pad and click on the tab for Change Control Landscape. Right click and create a change control landscape.
You can choose which logical component groups to add to the change control landscape.

Note: It is possible to create multiple change control landscapes and assign individual logical components to each of the change control landscapes. This allows more complex Change Request Management configurations. This reference guide uses one change control landscape with the logical component group for SAP S/4HANA assigned to it.

3.9.2. Enable change control in the solution

In SAP Solution Manager 7.2, SAP recommends the use of change documents for handling the changes in solution documentation. To achieve this, enable change control for the branch within the solution.

In an implementation project, the development branch is enabled with change control because this is where the solution documentation is changed. Examples of changes include modification of the business process structure and the addition of functional specifications, technical specifications and test cases.
Navigate to the solution is via the tile *Solution Administration* in the SAP Solution Manager 7.2 Fiori Launch Pad.

To enable change control, modify the properties of the branch with the selection of the radio button shown below:

**Note:** Once change control is enabled, it is not possible to edit the branch without having a change document assigned to it. The change control enablement is done prior to implementing any changes within a specific branch. If changes within the branch have already been made without change control, the user should first release all the changes to the production branch and then enable change control.

**Tip:** SAP recommends enabling change control in the development branch of the solution before the release of the imported SAP Best Practices content from the import branch into the development branch.
3.9.3. Change cycles

A change cycle is a type of change transaction that defines the system landscape (change control landscape and branch) and the transport tracks. Each change cycle has a defined set of phases, depending on its type. The phases define which activities are permitted as part of change control.

There are three different types of change cycle in SAP Solution Manager 7.2:

- Continual cycle
- Phase cycle
- Release cycle

The continual cycle is for customers who do not plan to do regression testing and a formal go-live of changes. Each change is treated individually and imported separately (e.g. urgent change), or in a small bundle (e.g. daily import job). However, there are no quality gates or phases involved. This approach provides maximum flexibility but also means a higher risk.

The phase cycle is the traditional approach to change management in SAP Solution Manager. It provides a simple phase model that bundles all changes assigned to it. The implementation is done throughout the development phase. In the test phase, different types of tests are performed such as integration tests, user acceptance tests and regression tests. In the deploy phase, the production import is done. This approach provides more security through a joint import method (import all transports associated with the phase cycle) and by reducing technical inconsistencies (compared to the continual cycle). It is ideal for managing project implementations.

The release cycle is used in combination with Release Management. It is based on a phase cycle but is enhanced with many features such as the definition of multiple releases and the dependencies between them. It follows the Information Technology Infrastructure Library (ITIL) approach of release management. Plan the release cycles in a release schedule before processing each cycle individually.

The relationship between the phase cycles, request for change/IT requirement and change documents is shown in the diagram below:
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3.9.3.1. Define a change cycle and create a task list

First, decide which type of change cycle you will use for your implementation. The list below describes the typical scenarios for the SAP S/4HANA implementation with SAP Best Practices:

- If you implement the changes in one step and transport them across the SAP S/4HANA system landscape in stages, create a phase cycle. The entire SAP S/4HANA implementation would be carried out in one phase cycle.
- If you implement the changes in multiple waves, create a release plan and release cycles. This will allow the transport of one wave of changes across the entire SAP S/4HANA system landscape before a new set of changes is done in the next wave.

A demo showing the creation of a change cycle is available at this link.

To access any of the change control functionality, navigate to the SAP Solution Manager 7.2 Fiori Launch Pad and select Change Management.

Note: For the implementation of SAP S/4HANA based on SAP Best Practices, phase or release cycles can be used. This reference guide uses the phase cycle. The continual cycle is not used as there are no quality gates or phases involved in continuous movement of changes across SAP S/4HANA system landscape.
To create the change cycles, select the tile *Change and Release Management*.

This opens the CRM UI screen below. In the left navigation panel, click on *Change Request Management* and select *Change cycle* in the work area *Create*. 
Note: You should be assigned the appropriate business role to access the CRM UI.

Based on the change cycle selected, choose the appropriate Transaction Type. This reference guide uses the phase cycle.

Assign the change control landscape and the branch to the cycle.
To create a task list, change the status of change cycle from *Created* to *Scope*. The system prompts the user to create the task list for managing the transport requests in SAP S/4HANA system landscape.

### 3.9.3.2. Assign change cycle to PPM project

If PPM project management is used, assign the change cycle to the project. Navigate to the PPM project via the tile *My Projects* in *Project and Process Management* in SAP Solution Manager 7.2 Fiori Launch Pad and assign the change cycle at the root node.
Note: In practice, it is possible to create as many phase cycles as required for a given change control landscape and branch. These phase cycles are used to handle changes that are not part of the PPM Project. For the implementation of SAP S/4HANA with SAP Best Practices, create one phase cycle for a given change control landscape and development branch. Assign this phase cycle to the PPM project.

3.9.4. Change documents
During project implementation, all the new requirements, involving changes in the SAP S/4HANA system landscape or in the SAP Solution Manager 7.2, end up in a change document once approved. All changes during on-going maintenance also end up in a change document once approved. The change documents trigger the transport of these changes to the production SAP S/4HANA system and the release to the production branch of SAP Solution Manager 7.2. Change documents can be managed in the three ways listed below and you must choose how to proceed:

1. Requirements Management: an IT requirement is created and change documents are generated from it. This is used for implementation projects and is the approach recommended by SAP for the prepare phase.
2. Change Request Management (ChaRM): a request for change is created and change documents are generated from it. SAP recommend using this for on-going maintenance.
3. Create change document directly, without predecessor IT requirement or request for change (not recommended by SAP).

A change document provides the developer with details such as “which landscape to use?”, “which development system to use?”, or “what to implement or change?”. All this information is stored and made available directly in the change document.

The different types of change documents used are:

- Normal change
- Urgent change
- Administration change
- General change
The table below shows how these are used, highlighting how they integrate with transport management.

<table>
<thead>
<tr>
<th>Change Document type</th>
<th>Use in SAP Solution Manager 7.2</th>
<th>Use in SAP S/4HANA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal/Urgent Change</td>
<td>Manage the solution documentation changes corresponding to the changes in the SAP S/4HANA system. Release the solution documentation change to the parent production branch</td>
<td>Manage the transportable changes like configurations and custom developments. Supports the movement of transport requests across the system landscape.</td>
</tr>
<tr>
<td>Administration/General Change</td>
<td>Manage the solution documentation changes that have no impact on the SAP S/4HANA system. Release the documentation change to the parent production branch</td>
<td>Manage the non-transportable changes like system parameter maintenance, user creation or any manual changes.</td>
</tr>
</tbody>
</table>

3.9.5. **Transport Management using change documents**
The normal and urgent change documents are managed within SAP Solution Manager 7.2, however, the transport requests are generated in the development system of the managed system landscape. This tight integration between SAP Solution Manager 7.2 and SAP S/4HANA landscape is managed with the remote function call (RFC connections) and is depicted below:
Note: SAP recommends locking the managed system landscape against any direct changes. This ensures that all the changes are governed by Change Request Management or requirements management. The user creating the transport requests should have the necessary authorizations in the SAP S/4HANA development system and SAP Solution Manager 7.2.

The user/developer working on the managed system creates the transport requests via SAP Solution Manager 7.2. They need to set the status of the normal/urgent change document to In Development and create the transport requests via the assignment block Transport Management. This is shown in the screenshot below:
3.9.6. Prerequisites for using requirements management and Change Request Management (ChaRM)

The prerequisites for using requirements management in your SAP S/4HANA implementation are:

1. Define the solution and logical component groups, in application Solution Administration → tab System Landscape.
2. Identify the system landscapes where change control is required. Add the corresponding logical component groups to the change control landscape in application Solution Administration → Tab Change Control Landscape.
3. Complete the TMS setup for the system landscape. The initial set of activities are listed in the chapter Setup SAP Transport Management System (TMS).
4. Set up client specific transport routes between the development, quality and production systems of SAP S/4HANA. Select single import strategy and set the parameter CTC to 1 in the transaction STMS.
5. Create the users within SAP Solution Manager 7.2 and SAP S/4HANA. Assign the appropriate authorizations.
6. Generate the business partners for all the users in SAP Solution Manager 7.2.
7. Complete custom configurations (if required).

Note: More information on SAP Solution Manager 7.2 authorizations can be found in the security guide.

In addition to prerequisites listed for requirements management, the following steps must be completed to use Change Request Management:

1. Complete the basic ChaRM configurations in transaction in transaction SOLMAN_SETUP.
2. Complete any custom configuration requirements for ChaRM in transaction SPRO.

This reference guide uses the standard ChaRM configuration.

3.10. Using requirements management in prepare phase

As mentioned earlier, the key activities to be completed during the prepare phase are:

2. Import SAP Best Practices content into import branch of SAP Solution Manager 7.2. This is followed by scope alignment with the SAP Best Practices in SAP Solution Builder and process alignment with the customer’s business in the import branch of the solution.
3. Release the SAP Best Practices content into the development branch of the solution in SAP Solution Manager 7.2 after the initial process modelling.

SAP recommends completing the setup of requirements management or Change Request Management before initiating these activities. See the previous section. The first and the third activity listed above should be recorded in change documents.

The steps below summarize the requirement management activities to be completed during the prepare phase:

1. Create a business requirement in SAP Solution Manager 7.2 via SAP Solution Manager 7.2 Fiori Launch Pad and generate the related IT requirement. Alternatively, you can create an IT requirement directly in SAP Solution Manager 7.2 via SAP Solution Manager 7.2 Fiori Launch Pad.
2. Assign the phase cycle to the IT requirement.
3. Assign documents related to the activation of SAP Best Practices configuration content in SAP S/4HANA to the IT requirement.
4. Insert an administration change document type into the scope of the IT requirement. This is used when the SAP Best Practices content is released from the import branch to the development branch in the Solution Documentation application.

5. Insert a normal change document type into the scope of IT requirement. This is used to capture the activation of SAP Best Practices configuration content using SAP Solution Builder in the development system of SAP S/4HANA landscape.

6. Process the IT requirement through to the status Implement, which will generate change documents.

7. Assign the user working on the process documentation to the administration change document, so that the change document is visible for assignment in the development branch.

8. Assign the administration change document to the development branch of the solution.

9. The user activating the SAP Best Practices content should set the status of the normal change document to In development and then create transport requests required during the activation.

3.10.1. Create business requirement

A detailed demo of the creation of the business requirement can be found [here](#).

To create a business requirement, navigate to the tile My Requirements within Project and Process Management in SAP Solution Manager 7.2 Fiori Launch Pad.

The Fiori app for creating the business requirement is shown below:
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The typical flow from business requirement to IT requirement is shown below:

When the status of the business requirement is set to *Handed Over to IT*, an IT requirement is automatically created.

Note: The business manager can reject the requirement raised by the business process experts and set the status of the business requirement to *Rejected*. 
3.10.2. Create IT requirement

A detailed demo of creating an IT requirement can be found here.

An IT requirement is created in two ways:

- When the status of the business requirement is set to *Handed Over to IT*.
- Directly created via the transaction CRM_UI or via the tile *Requirements Management* within *Project and Process Management in the SAP Solution Manager 7.2 Fiori Launch Pad*.

Navigate to the tile *Requirements Management* within *Project and Process Management in the SAP Solution Manager 7.2 Fiori Launch Pad*.

This leads to the CRM UI shown below:

**Note:** The user accessing the CRM UI should be assigned with the appropriate business role.
To navigate to the IT requirement generated as a result of the business requirement, the user can:

- Search for Business Requirement in Search and then look for the IT requirement in the assignment block Related Transactions.
- Search for IT Requirements in Search with the same description as the business requirement.

**Note:** To create the IT requirement directly without any linkage to the business requirement, click on IT Requirement within Create in the above screenshot.

Some of the important assignment blocks within an IT requirement are described below:

1. **Details:** It contains data about the transaction ID; description, status, priority, category and impact of the IT requirement; users involved; creation, last changed, start and end dates; associated PPM project and tasks. The fields marked in asterisk (*) are mandatory.
2. **Text:** Enter the texts relevant to the IT requirement or for the processors here. You can choose the text type and then enter the text.
3. **Attachments:** All the documents required for the IT requirement can be attached here. Alternatively, you can attach the documents to the impacted business process structure node in solution documentation. Then select the document in the object assignment section of the node and assign the IT requirements as Related Documents in the attributes section. You should also assign the IT requirements as Related Documents in the object assignment section of the business process structure node.
4. **Solution Documentation:** You can link single/multiple nodes in solution documentation to the IT requirement here. If the IT requirement is created directly from a node in solution documentation, this assignment block is auto-populated.
5. **Scope:** You insert the type of change document required for the fulfilment of the IT requirement here. This is explained in detail in the later part of this chapter.
6. **Checklist:** This assignment block provides a list of steps to be fulfilled before the implementation of the IT requirement. You should maintain the users and the status of each step before proceeding with the IT requirement. SAP Solution Manager 7.2 provides a default checklist which can be modified as required.
7. **Related Transactions:** All the entities, which are predecessor to the IT requirement, such as business requirement are listed here.

The overall process flow for an IT requirement, including its link with the business requirement is shown below:
Once the IT requirement is set to the status *Submitted for Implementation*, the solution architect can define the type of change document to be used within the assignment block *Scope* of the IT requirement.

The change document is generated when the status of the IT requirement is set to *Implement*.

**Note:** The IT team can reject the business requirement based on the technical feasibility. In such cases, the status of the business requirement is set to *Rejected by IT* and the status of the IT requirement is set to *Rejected.*
3.11. Using request for change in prepare phase

Ignore this chapter if you are using requirements management. SAP recommends using a requirements management in the prepare phase. The list below summarizes the steps to follow if you decide to use a request for change:

1. Create request for change and assign the change cycle.
2. Add the change document types as line items in the scope of the request for change.
3. Validate and approve the request for change.
4. Release the request for change for development and generate the change documents.

A demo showing a request for change and change document is available at this link.

To create a request for change, navigate to Change Management in the SAP Solution Manager 7.2 Fiori Launch Pad and select the tile for Change Requests Management. In the CRM UI, click on Request for Change in the work area Create.

Assign the change cycle to the request for change and maintain the mandatory fields (fields with *).
Add the change document types as line items in the scope of the request for change. Use *Administration change* and *General Change* for changes with no transport requests. Use *Normal change* and *Urgent change* for system changes with transport requests.

A request for change can contain multiple change documents. The change document is generated when the request for change is released for development.

In the prepare phase for the SAP S/4HANA implementation based on SAP Best Practices you should:
• Create and approve an administration change document to capture the import of SAP Best Practices into SAP Solution Manager 7.2. Alternatively, ensure one is in place when the scope is released from the import branch to the development branch in the Solution Documentation application.
• Create and approve a normal change document to capture the activation of SAP Best Practices configuration content using SAP Solution Builder. Set the status of the normal change document to In Development and create the transport requests (TRs). The SAP Best Practices activation is captured within the TRs.

3.12. Project management
SAP Solution Manager 7.2 offers functionality for project management, which supports the entire process of managing your project: from conception to planning and quality checks, through to the completion. More information on project management in SAP Solution Manager 7.2 can be found here.

3.12.1. Import reference project plan
A reference project plan to manage the SAP S/4HANA on-premise implementation based on SAP Best Practices can be downloaded from the Roadmap Viewer.

Follow these steps:
1. Navigate to the Roadmap Viewer.
2. Select SAP S/4HANA roadmaps.
3. Select the on-premise roadmap: Transition to SAP S/4HANA.
4. In the selected roadmap, click on Download Project Plan. A ZIP file is downloaded, from which an XML file can be extracted.

Follow the steps below to import the XML file into SAP Solution Manager 7.2:

1. In SAP Solution Manager 7.2 Fiori Launch Pad, select the tile My projects in Project and Process Management.
2. Click the button Import Project.
3. Select the Application as XML File and maintain extracted XML file path.
4. Click on Import Selected Data.
5. Maintain the Target Object
6. Select Data for Import: Structure, Resources and Resource Assignments. Click on the Check.
7. Click on Import.

You then change the reference project plan to suit your needs with content added, removed, merged and changed. In SAP Solution Manager 7.2 Fiori Launch Pad, navigate to the tile My Projects in Project and Process Management. In the tab Last Used Projects, the list of last viewed project plans can be viewed. The imported project plan will be on top of the list directly after the import. Click on Project (Description) to navigate to the project plan.
In the project plan, the left navigation panel lists all different project elements. The project elements are grouped into the SAP Activate phases.

Each SAP Activate phase consists of the main deliverables and tasks to be completed within that phase.
You can navigate as shown below:

Navigate to the tab **Subtasks**. All the tasks listed in the left navigation panel are listed here as well. You can maintain parameters, such as status, responsible role, responsible resource and effort for each of the tasks.
3.12.2. PPM project and solution

In SAP Solution Manager 7.2, project management is tightly integrated with solution documentation, requirements management, and Change Request Management.

In the project plan, select the root node and go to the tab Solution Documentation. To link the solution to the PPM project, click on the button Assign Solution Documentation.

Tip: To use the project management capabilities of SAP Solution Manager 7.2 with the solution, the link between the solution, PPM project and change cycle is required. The link between PPM project and change cycle is covered in the chapter Assign change cycle to PPM project.
3.12.3. **Tasks within the PPM project**

The project manager can use existing tasks or create new tasks within the PPM project. They can assign the responsible resources and the expected date of completion to the task. This allows the project manager to keep track of the implementation project and to generate project progress reports.

To create a new task, select the phase and the appropriate node and click on the button *Create Task*.

Enter the *Basic Data* as highlighted below:
3.13. Activate SAP Best Practices using software appliance

The activation of SAP Best Practices configuration content in the SAP S/4HANA development system can be achieved by:

1. Using SAP Solution Builder or

In the discover phase, the customer should discuss and finalize the approach for the activation of SAP Best Practices configuration content in SAP S/4HANA system.

In chapter Choose SAP Best Practices packages and activation approach, the term “appliance” was introduced. The SAP S/4HANA Software Appliance is a software bundle that contains the product, the database, the configuration (both technical and business) and optionally some sample data. An appliance can be consumed in two ways:

- Hosted in the SAP Cloud Appliance Library.
- Installed on-premise using a Blu-ray disc.

Among the different clients available with the SAP Software Appliance, client 400 contains the ready-to-activate SAP Best Practices content. Based on the landscape strategy, there are two possible uses of the appliance:

- Setup the SAP S/4HANA sandbox system.
- Setup the SAP S/4HANA development system.

The diagram below summarizes the two options.
For further information on using the SAP Software Appliance, check the SAP S/4HANA administration guide.


SAP Solution Builder, with official name SAP Best Practices Solution Builder, is a tool developed by SAP to deploy SAP Best Practices packages. It enables you to:

- Create a scope based on the scenarios in the SAP Best Practices package.
- Personalize settings (for example, the required enterprise structure).
- Activate the solution scope rapidly, reducing the implementation time and possibility of errors.

The below diagram explains the components within SAP Solution Builder:

![SAP Solution Builder Diagram]


SAP Solution Builder is used to activate the SAP Best Practices configuration content in the development system and/or sandbox system of SAP S/4HANA landscape.

A demo of the activation of SAP Best Practices configuration content using SAP Solution Builder can be found here.

Note: In this reference guide, SAP Best Practices are activated in the development system of the SAP S/4HANA landscape rather than a sandbox system.
If SAP Solution Manager 7.2 requirement management or change management is being used, create a normal change to capture the activation. This is covered in a previous section on Change Request Management and requirement management.

The main steps for activating the SAP Best Practices using SAP Solution Builder are listed below. The detailed steps are described in the administration guide for the implementation of SAP S/4HANA on premise and all the steps must be followed.

1. Access SAP Solution Builder in SAP S/4HANA via the transaction /N/SMB/BBI. (SAP Solution Builder is a standard component of SAP S/4HANA).
2. Import the solution scope files and installation data files into SAP S/4HANA from the reference content which is part of the S/4HANA system. Check SAP Note 2226371 for the latest activation information and reference content updates.

The solution scope files contain the complete scope of the selected SAP Best Practices. They consist of scope items, building blocks and activities. Each activity consists of the relevant settings and installation data file. The installation data file contains the actual configuration settings and master data.

In transaction /N/SMB/BBI, import the solution files as shown below:

To import the installation data, navigate as shown below:

3. Make the solution a favorite using the favorite button and then edit it. The user can deselect any scope items that are not needed.
Note: SAP recommends copying the imported SAP Best Practices solution package and installation files before making changes to the scope items.

4. Use the implementation assistant button to activate the SAP Best Practices.

While activating the activation content of a SAP Best Practices package, pop-up appears in the SAP S/4HANA system to enter the transport requests. These transport requests are created as a part of the normal change document within the S/4HANA development system. The transport requests are then moved through the landscape to the production system.

3.14.2. Implementation of multiple SAP Best Practices

When the customer selects multiple SAP Best Practices, the impact on SAP Solution Builder is determined by the overlap between the SAP Best Practices content.

When there is no overlap between the different SAP Best Practices content, the activation steps are as described in the previous section.

When there is overlap between the SAP Best Practices content, first activate the main package including the scope items that have overlap with other packages. During the import and activation of further SAP Best Practices, the SAP Solution Builder activates only those scope items and building blocks that have no overlap with the main SAP Best Practices.
3.15. Identify, select and load SAP Best Practices content into SAP Solution Manager 7.2

After the configuration content of the SAP Best Practices package is activated in SAP S/4HANA, SAP recommends the import of SAP Solution Manager 7.2 content for the appropriate SAP Best Practices package into SAP Solution Manager 7.2. This helps in managing the overall SAP S/4HANA solution lifecycle.

3.15.1. Import SAP Best Practices content

A detailed demo of the import of SAP Best Practices into SAP Solution Manager 7.2 can be found here.

Before the import of SAP Solution Manager 7.2 content for the SAP Best Practices into SAP Solution Manager 7.2, the following prerequisites should be undertaken. They have been covered in the previous sections:

1. Create a solution (if no solution has been created so far).
2. Define the logical component groups and the logical components.
3. Assign the systems to the specific roles in the logical component.
4. Create a development branch.
5. Create an import branch within the development branch.

Note: For the download of SAP Best Practices into SAP Solution Manager 7.2, SAP recommends to create an import branch. You can create import branch as a child to the development branch or as a child of design branch, which in turn is a child to the development branch of the solution. In the reference guide, an import branch is created as a child to the development branch of the solution.

Note: If used, SAP Solution Manager 7.2 requirement management or Change Request Management will be set up before the content is released from the import branch to the development branch. SAP recommends the use of requirement management.

To load the SAP Best Practices, navigate to SAP Solution Manager 7.2 Fiori Launch Pad and select the tile Solution Administration under Process and Project Management. Select the Solution and navigate to the tab SAP Best Practices Packages.
Click on the button highlighted below and select **Import**.

Select the SAP Best Practices package (the same as the one activated in the SAP S/4HANA). Select the branch and the logical component group for the start of the import of the SAP Solution Manager 7.2 content of the SAP Best Practices package. After the SAP Best Practices package is imported, it is no longer shown within the import selection list.

**Note:** The logical component group is automatically populated if only one logical component group exists within the solution. If there are multiple logical component groups maintained within the solution, the user should select the required logical component group so that the SAP Best Practices content is mapped correctly.

Once the import is complete, the SAP Best Practices package is listed in the tab **SAP Best Practices Packages**. The process content is now available within solution documentation.
After the import into SAP Solution Manager 7.2, two folders are automatically created in the Solution Documentation:

- The SAP Best Practices content (except the business processes) is stored in the folder Libraries.
- The folder Business Processes contains the processes which reference the content in the library.

Note: The library is specific to the solution and branch. When the changes in a branch are released, the library is also released and updated in the parent folder.

Note: After the import of the SAP Best Practices package content into the import branch of the solution in SAP Solution Manager 7.2, a scenario is created with the same name as the imported package. The imported processes are created within this scenario and have no defined sequence.

Activation of multiple SAP Best Practices in SAP S/4HANA system landscape requires the import of multiple SAP Best Practices into SAP Solution Manager 7.2. See separate section on this topic.

3.15.2. View SAP Best Practices content in SAP Solution Manager 7.2

A demo showing the SAP Best Practices content in SAP Solution Manager 7.2 is available at this link.

There are two ways to access and view the imported SAP Best Practices content

1. Navigate to the tile Solution Documentation in Process and Project Management via the SAP Solution Manager 7.2 Fiori Launch Pad. Select the appropriate solution to view the content.
2. Navigate to the tile **Solution Administration** in **Process and Project Management** via the SAP Solution Manager 7.2 Fiori Launch Pad. Select the appropriate solution and go to the tab **Branches**. In the column **Navigate**, select the link maintained against the appropriate branch:

In SAP Solution manager 7.2, there are two views of the process content:
- Column browser view
- List view

To switch between the views, click on the highlighted region:
In the column browser view, the business process structure is displayed in hierarchical format. Unlike SAP Solution Manager 7.1, the business process structure definition is not limited to a 3-tier structure. The user can create folders as required and then define the business scenarios, business process and business process steps within them.

**Note:** The imported SAP Best Practices package is represented as a scenario in solution documentation. The SAP Best Practices scope items are shown as processes with process steps. The process and process steps do not follow a logical sequence and should be aligned with your business.

The general layout of the Solution Documentation screen is shown in the screenshot below:

To create a new folder at the business scenario, business process or business process step level, right click on the appropriate column and click on New as shown below:
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**Note:** The hierarchy followed in SAP Solution Manager 7.2 is Folder or Scenario → Process → Process Step or Interface. The options available against New is dependent on the level at which the user is creating the content.

The list view provides a consolidation of the different entities in process management and has an embedded filter mechanism. The data provided in the list view is dependent on the process element selected. This is illustrated in the screenshot below.

The red highlight provides the bread crumb view of the selected content within the process structure. This is available in the column browser as well as the list view. The blue highlight displays the different entities.
within the content selected. It also provides filter options. The user can filter the data based on element types as well as, change status, change document, attributes or any combination of these.

### 3.15.3. Activation of change tracking

Users can visually track changes within the solution documentation. This helps in filtering the data in the list view and identifying the changed process content before releasing the change to the higher level parent branch. For example, a release from the import branch to the development branch or from the development branch to the production branch.

To activate change tracking, navigate to *Settings* as highlighted below:

Click on the checkbox for *Change Tracking Mode*. 

![Change Tracking Mode](image-url)
3.16. Import of multiple SAP Best Practices in SAP Solution Manager 7.2

Similar to the SAP Best Practices activation in SAP S/4HANA, first import the main SAP Best Practices package, followed by the other SAP Best Practices into the SAP Solution Manager 7.2.

Consider two scenarios:

- Multiple SAP Best Practices packages without content overlap.
- Multiple SAP Best Practices packages with content overlap.

The table below explains how the SAP Best Practices are imported in each of the scenarios:

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Import of SAP Best Practices content into SAP Solution Manager 7.2</th>
</tr>
</thead>
</table>
| Multiple SAP Best Practices without content overlap | • Import the main SAP Best Practices package into SAP Solution Manager 7.2.  
• The library is updated with the content of the main package. 
• Import an additional SAP Best Practices package. 
• The library is further updated with the content from the additional SAP Best Practices package.  
One scenario is created at the business process level for each SAP Best Practices package. |
| Multiple SAP Best Practices with content overlap | • Import the main SAP Best Practice package into SAP Solution Manager 7.2.  
• The library is updated with the content of the main package. |
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Scenario | Import of SAP Best Practices content into SAP Solution Manager 7.2
--- | ---
* | Import an additional SAP Best Practices package. The library is updated with the delta content i.e. only those elements (process steps, executables, interfaces, developments, configuration units and alerts) which are not already loaded. One scenario is created at the business process level for each SAP Best Practices package. The main SAP Best Practices package is given priority (first load) and contains all the business processes. The folder for other SAP Best Practices packages contains only the delta business processes.

**Note:** SAP recommends the use of one solution only and the SAP Best Practices packages should be imported into the same import branch of the same solution. This ensures conflicts are managed when releasing the changes from import branch to development branch.

Two SAP Best Practices have an overlap if the same process exists in both. The table below provides a few example scenarios that you may encounter and explains the result:

<table>
<thead>
<tr>
<th>Example Scenario</th>
<th>Steps Undertaken</th>
<th>Result in Solution Manager 7.2 after all steps (import branch)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Import of multiple SAP Best Practices packages with content overlap and NO structural alignment before second import</td>
<td>Import the first SAP Best Practices package into the import branch of the solution. Import the second SAP Best Practices package into the import branch of the solution.</td>
<td>In solution documentation, the scenario for the first SAP Best Practices includes the content unique to the first package and an updated version of the content that is common to the first and second SAP Best Practices packages. A new scenario for the second SAP Best Practices package only contains content that is unique to the second package.</td>
</tr>
<tr>
<td>Import of multiple SAP Best Practices packages with content overlap and structural alignment before second import</td>
<td>Import the first SAP Best Practices into the import branch of the solution. Release all processes which are in scope (based on the activated SAP Best Practices in SAP S/4HANA via SAP Solution Builder) to the development branch. In the development branch, complete the structural alignment steps. All these adaptions are immediately visible in the import branch. Import the second SAP Best Practices package which has overlap with the first package into the import branch of the solution.</td>
<td>The structural alignment changes, done in the first package content are kept. New content updates to the common processes, from the second package are added. If there is a conflict, the structural alignment changes are kept. A new scenario for the second SAP Best Practices package only contains content that is unique to the second package.</td>
</tr>
</tbody>
</table>
Any changes in the first package caused by the second package import can be viewed in the list view. Set the filter “Change Status” to “Changed” and “Created” in the list view as shown below.

Note: You can set the user parameter SMUD_SHOW_HIDDEN_ATT to “X” in the menu System > User profile > Own Data. After the parameter is set the attributes are enhanced on process level to get a where-used list of all SAP Best Practices packages where this process exists. SAP Best Practices packages that have not been imported are also shown. Using this list and the data on imported SAP Best Practices, you can find out if the process was updated or not. This requires manual effort.

3.17. Scope and modeling alignment of SAP Best Practices content in SAP Solution Manager 7.2

The SAP Best Practices content, imported into SAP Solution Manager 7.2, should be aligned with:

- The activated scope in the SAP Solution Builder (scope alignment).
- Your organizational requirements (structural alignment).

SAP recommends releasing only the processes in scope from the import branch to the development branch. Then do a structural alignment in the development branch. This separates the SAP Best Practices packages in the import branch, from the customer adaptions in the development branch. Also, the alignment is governed by change control. See section below on Alternative Approaches about doing all the changes in the import branch.

SAP recommends the following sequence:

- Import of SAP Best Practices package into the import branch of the solution in SAP Solution Manager 7.2.
- Release all processes, which are activated in SAP Solution Builder in SAP S/4HANA, to the development branch of the solution.
- Complete structural alignment in the development branch of the solution in SAP Solution Manager 7.2.
Implement SAP S/4HANA on-premise with SAP Best Practices - Reference Guide

3.17.1. Scope alignment with SAP solution builder
The business process structure in SAP Solution Manager 7.2 has to be aligned with the activated scope items in SAP S/4HANA.

The first step is to check the activated scope items in SAP S/4HANA. To do this, navigate to SAP Solution Builder in SAP S/4HANA via transaction /n/smb/bbi and check the activated scope items in the Solution Editor or in the Implementation Assistant – Solution View.

The items in scope are displayed as shown below:

![Implementation Assistant - Solution View](image)

The business processes in SAP Solution Manager 7.2 are listed as shown below and are compared with the scope items in SAP Solution Builder.
3.17.2. Release of the SAP Best Practices content (in scope) to the development branch

After the import of SAP Best Practices into SAP Solution Manager 7.2, the content should be released from the import branch to the development branch before making structural alignment and process changes.

**Note:** Prior to the release of data from import branch to the development branch, the following prerequisites should be undertaken as described in previous sections:

1. Enable change control for the development branch
2. Create an IT requirement or request for change and generate an administration change document.
3. Assign the user working on the solution documentation to the administration change.

As described previously, the process documentation is stored in a tree structure with a parent folder, scenarios, processes and process steps. You may choose to release by parent folder, scenario or process. If all the processes within the SAP Best Practices are in scope, you can release at the highest possible node using the *subtree changes* option. However, if only a few of the processes are in scope and have been activated in SAP S/4HANA, you should selectively release each of the processes using the *subtree changes* option.

Select the administration change document by clicking on the highlighted region in the development branch of the solution.
Note: When the change document is selected within the solution documentation, all the changes are captured within the assignment block Solution Documentation of the change document. You can also navigate to these nodes in solution documentation via the change document.

To release the SAP Best Practices content, navigate to the import branch of the solution as shown below.

Right click on the each node you want to release. Click on Subtree Changes → Release changes.
The system prompts the user to confirm the changes and then releases the content from the import branch to the development branch. The changes are captured in the selected administration change document. SAP recommends using the `subtree changes` option. See Alternative Approaches section below to understand the `element changes` option.

After the release, any further changes, including the structural alignment, should be done in the development branch.

**Note:** You might choose not to use requirement management or Change Request Management to implement SAP S/4HANA based on SAP Best Practices. In such cases, you would manually release the changes in the development branch to the production branch. Also the changes in SAP S/4HANA are moved manually to the production system.

**Note:** If you use the design branch, you should manually release the processes in scope from the import branch to design branch of the solution. After the structural alignment in the design branch, select the change document in the development branch and then release the content from design branch to the development branch. The structural alignment in the design branch is not governed by change control.

### 3.17.3. Structural alignment

The imported SAP Best Practices content is provided in a single scenario with multiple processes and process steps. This is not logically sequenced and should be restructured to match your organization’s business. The structural alignment is done in the development branch of the solution in SAP Solution Manager 7.2. However, this alignment does not involve changes, such as, creation of new process steps or modification of the existing assignments in the business process structure. These changes are done in the realize phase or at the end of explore phase.

The activities undertaken during the prepare phase in the development branch are listed below:

- Create new folders and scenarios in the development branch of the solution, to structure the scope items to suit your organization. The scope items are equivalent to the processes in SAP Solution Manager 7.2.
- Move processes into the new scenarios.
- Rename the process or process steps, if required.
- Align the process diagrams, if required.

**Note:** If used, the structural alignment is done in the design branch.

### 3.17.3.1. Create new folders
To create a new folder, right click at the column within the folder *Business Processes* as shown below and select *New → Folder*.

In the attributes section, maintain the name of the new folder.
3.17.3.2. Create new scenarios
Within the folder, create new business scenarios and their attributes. To create new business scenarios within a folder, select the folder and right click at the next column. Select New → Scenario and maintain the data on the attributes section.

3.17.3.3. Move processes to new scenarios
You can move the processes from the scenario SAP Best Practices Import to the newly created scenarios and group them as required. At this point, do not to make changes to the standard content delivered by SAP. Select the process to be moved to the new folder. Right click and select Move <Selected process name>. 
Now select the target folder/scenario, where the process should be moved. Right click and select *Insert* `<Process name>`. If required, rename the process or the process steps to suit your organizational requirement.

**Note:** It’s only possible to move processes to scenarios and not to folders. As a consequence folders are used to structure the scenarios and the scenarios reflect the process chain of the assigned processes. It is recommended to realize the process chain sequence within the scenario by the sequence of the assigned processes.
3.17.4. Align process models

A demo of the process structure modifications can be found [here](#).

The imported SAP Best Practices content contains process diagrams. You can view the process diagram for the selected process as shown below:

Based on the changes done to the process structure, process diagrams may also need adjustments. Changes done to the process name are automatically visible in the process diagram. Click on the process diagram name to view the diagram.
3.17.5. Alternative approaches

Although not recommended, it is also possible to do the scope alignment and the structural alignment in the import branch. The following table compares the two approaches.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Alignment in import branch</th>
<th>Alignment in development branch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change control</td>
<td>Import branch is not change enabled. During the release of content to the development branch, all the processes are captured within the selected change document.</td>
<td>All changes covered by change control.</td>
</tr>
<tr>
<td>Sequence</td>
<td>The new structure is defined in the import branch. SAP Best Practices processes which are in scope are moved to the new scenarios defined. You release at the scenario or folder level in the new business process structure.</td>
<td>The required SAP Best Practices are released into the development branch. The new structure is defined in the development branch. SAP Best Practices processes are moved to the new scenarios defined.</td>
</tr>
<tr>
<td>Visibility in parent and child branches</td>
<td>Structural adjustments are not visible in parent branch before release from import to parent branch.</td>
<td>Structural adjustments are immediately visible and relevant in child branch without any release.</td>
</tr>
</tbody>
</table>

Instead of using the *subtree changes* option, the *element changes* option can be used to release the content from the import branch to the development branch. The two options are compared in the table below:
Option | How | Result in Development Branch
--- | --- | ---
Release using Subtree Changes | Select and right click on one of the nodes. Select Subtree Changes and Release Changes | The selected node with its attributes, sub nodes and the attributes of the sub nodes are released to the development branch. This includes the process links and the associated process. The parent nodes in the tree above are also released at the same time.

Release using Element Changes | Select and right click on one of the nodes. Select Element Changes and Release Changes. | The release includes the attributes of the selected node but nothing below. Scenarios, processes, process steps and assigned elements, including the process links and associated process, within the selected node are not released. The parent nodes in the tree above are released at the same time.

### 3.18. Test SAP Best Practices activation

After activating the SAP Best Practices in SAP S/4HANA development system, you should test the SAP Best Practices processes before customer adaptations start. This checks if the development system is ready to be used in the explore phase workshops.

Standard test scripts are provided with the SAP Best Practices for each of the processes. To access these, select the document of type Document (Best Practice) assigned to the process.

Then click on the Test script and use this to test the process in the SAP S/4HANA development system.
Tip: The standard test scripts can also be accessed via the SAP Best Practices Explorer.

You can use the test suite in SAP Solution Manager 7.2 to test the activated SAP Best Practices configuration content. The test suite is integrated with solution documentation and is used to create test plans, test packages and to define the test sequences.

To test and confirm the activation of SAP Best Practices configuration content, you can use the executables assigned to the business process structure in solution documentation. The standard test scripts, provided with SAP Best Practices, can also be used as long as they are assigned within the group Test Cases in the assignment list of solution documentation. As shown in the screenshot above, the standard test scripts are available in the SAP Best Practices documents. You should download these test scripts onto your local machine and then upload them back into the appropriate business processes, within the group Test Cases. This is shown in the screenshot below:
3.19. Using SAP S/4HANA Best Practices alongside SAP Solution Manager 7.0 or 7.1 content

You may have an existing SAP Solution Manager 7.0 or 7.1 system with an end-to-end business process structure defined. In this case, the customer has two options before starting the new implementation of SAP S/4HANA based on SAP Best Practices:

- Some existing projects (in the transaction SOLAR_PROJECT_ADMIN or SOLAR01 or SOLAR02) and solutions may still need to be used. These need to be editable in SAP Solution Manager 7.2. Undertake “content activation” which migrates the old content to the new format. Further information on content activation can be found [here](#). Then upgrade the existing SAP Solution Manager 7.0 or 7.1 to the latest version of SAP Solution Manager 7.2 and the migrated content is available.

- If the existing projects and solutions are not required for future use, proceed as follow. Upgrade the existing SAP Solution Manager 7.0 or 7.1 to the latest version of SAP Solution Manager 7.2 without undertaking content activation. The old projects and solution will be available in read only mode in the new system.

The upgraded SAP Solution Manager 7.2 can be used for the new implementation of SAP S/4HANA based on SAP Best Practices.
4. Explore

In the prepare phase, you completed all the tasks related to the setup of the SAP Best Practices. However, it did not involve any changes to the configuration in the SAP S/4HANA system landscape. The purpose of the explore phase is to plan the adaptations to the activated SAP Best practices configuration content and this includes:

- Validate the activated SAP Best Practices configuration content in the SAP S/4HANA development system.
- Validate the imported SAP Best Practices content in SAP Solution Manager 7.2.
- Create new requirements.
- Analyze the feasibility and effort required for the new requirements.
- Understand and define how you intend to run your business with the solution.
- Finalize and define the test strategy and data migration strategies.

Refer to the SAP S/4HANA roadmap in the roadmap viewer for a general overview of explore activities including data migration strategy, test strategy and training strategy. The activities involving SAP Best Practices and SAP Solution Manager 7.2 in the explore phase are summarized in the table below:

<table>
<thead>
<tr>
<th>Activities</th>
<th>Systems Involved</th>
<th>Deliverable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undertake fit-gap workshops and create business requirements and IT requirements</td>
<td>SAP Solution Manager 7.2 and SAP S/4HANA</td>
<td>Identification of new requirements and gaps</td>
</tr>
<tr>
<td>Design customer adaptions</td>
<td>SAP Solution Manager 7.2</td>
<td>Solution design for the new requirements and gaps</td>
</tr>
<tr>
<td>Finalize the test strategy</td>
<td>SAP Solution Manager 7.2</td>
<td>Test strategy</td>
</tr>
</tbody>
</table>

4.1. Analyze the business processes

The following deliverables from the prepare phase provide the foundation for the explore phase:

- The activated SAP Best Practices configuration content in the SAP S/4HANA development system.
- The SAP Best Practice process documentation and process models in SAP Solution Manager 7.2.

This analysis is conducted during the workshops and is based on your organization’s business. The workshops confirm the suitability of the standard processes and identify and define new requirements and gaps. The SAP Best Practices accelerate the implementation and allow end to end demonstrations of SAP S/4HANA during the workshops.

The new requirements and gaps are captured as business requirements and IT requirements in SAP Solution Manager 7.2. The business should prioritize the new requirements and gaps and make decisions that leads to an agreed scope for implementation, over and above the activated SAP Best Practices configuration content.
4.1.1. **Document new requirements and gaps**

Requirements Management in SAP Solution Manager is a good way to capture new requirements and gaps. See the chapter Requirements Management, for more detail on how to use this capability in SAP Solution Manager 7.2.

To create business requirements use the SAP Solution Manager 7.2 Fiori Launch Pad. You can access it via the tile *My Requirements* within *Project and Process Management* in SAP Solution Manager 7.2 Fiori Launch Pad.

![Image of SAP Solution Manager](image)

Click on the icon highlighted in the screenshot to create a new business requirement. The business enters the *Title*, *Description* and *Priority* of the requirement. The business partners for *Business Process Expert* and *Business Manager* are also added.
The business requirements are realized through the configuration and developments in SAP S/4HANA and through the modification of solution documentation content and process models within SAP Solution Manager 7.2. The IT team checks feasibility, defines a solution and estimates the effort for each of the business requirements. IT requirements are created when the status of the business requirement is set to Handed Over to IT.

**Note:** You can also choose to work without business requirements and document everything directly in IT requirements.

**Tip:** You can create business requirements, IT requirements and requests for change directly from the solution documentation. Navigate to the solution documentation via the SAP Solution Manager 7.2 Fiori Launch Pad.
Select the solution and then the node in the business process structure. In the attributes of the selected node, select *Related Documents*.

Click on the link highlighted in screenshot below.
This opens another window. Depending on the type of entity selected, you can either create or assign a business requirement, IT requirement or request for change. Click on the button highlighted below for assignment or creation.

After the entity is assigned, you will find the corresponding solution documentation node in the assignment block Solution Documentation of the business requirement, IT requirement or request for change.
4.1.1.1. Reports for IT requirements and Business Requirements
You can get a list of the business requirements and IT requirements you have created. Select the tile for Requirements Management in SAP Solution Manager 7.2 Fiori Launch Pad.

Select IT Requirements within Search.
You can select the search criteria from the dropdown as shown below. Enter the search criteria, such as status, category, creation date or transaction type and click on Search.

Based on the search parameters, you now see all the IT requirements in the Result List. You can also display the reports in the form of pie-charts and bar graphs. Click on the button highlighted below.
Scroll down and select the data for which the graphical report should be displayed.

You can choose between pie chart and bar chart as below:
The report generated can be exported into Excel and saved for later use. Click on the button highlighted below to download the report.

You can get reports for business requirements using similar steps.

4.1.2. Prioritize requirements
You should prioritize the business requirements. The factors below are generally considered:
• Dependencies and integration: assess the impact of a requirement on other requirements by considering technical risk, dependencies and integration points.
• Scale: how many users will use and accept the requirement.
• Importance: business value measured by business benefits and importance of impacted users.

During the explore phase, many new requirements and gaps will be identified, discussed and estimated. The scope may change many times as new requirements are identified and the list is prioritized and re-prioritized. This process is usually undertaken in a backlog list which is often managed in Excel because it can provide a total estimate for filtered sets of requirements. The SAP Activate methodology provides an Excel template that can be used. The IT requirements in SAP Solution Manager 7.2 should match this backlog list but there is no feature for filtering and producing total estimates in the same way as Excel.

4.1.3. Document the new requirements and gaps

SAP recommends documenting new requirements and gaps throughout the project lifecycle i.e. during design, implementation, test and go-live.

The new requirements and gaps, identified during the workshops are first documented in SAP Solution Manager 7.2 using the field Description in the business requirement. Sometimes it is necessary to add further documents in the form of attachments for detailed information. This is also the case for IT requirements, change documents and solution documentation. To categorize the different types of attachment, different documentation types are used. The business and IT team can use standard SAP Solution Manager 7.2 document types or add custom document types of their own.

SAP Solution Manager 7.2 delivers dedicated documentation types for process descriptions, functional specifications, design, training and testing. These templates can be modified as required. The standard document types delivered with SAP Solution Manager 7.2 are available in the tab Document Types in Solution Administration of the solution. Select the Scope checkbox, next to the document types to add them to the solution.
To configure the properties of the document types, navigate to the tile Solution Administration in Project and Process Management in SAP Solution Manager 7.2 Fiori Launch Pad. The availability of the document types at different nodes in process management is defined in the Document Types Administration in Solution Administration as shown below.

Now that the document types have been set up, users can create documents using the document type templates and attach documents to their business requirements in the tab Attachments by clicking on the icon highlighted in the screenshot below:
The documents attached to the business requirement are copied to the generated IT requirement. Further documents can be created during the processing of the IT requirement.

SAP recommends the assignment of the relevant documents to the business process structure in solution documentation. You can then link the documents to the IT requirement. To do this, select the assigned document in the solution documentation and maintain the IT requirements as Related Documents in the attributes section. Also, select the business process structure node, where the documents are assigned, and maintain the same IT requirement as Related Documents. Thus, the impacted business process structure and the documents are automatically available in the assignment block Solution Documentation of the IT requirement. This is explained in the previous section.

Alternatively, you can attach the documents in the assignment block Attachments as shown in the screenshot below.

The documentations attached in the IT requirement can be accessed in the subsequent change documents. The documents created during the implementation of the change, such as configuration guides, test results and end user guides are assigned to the relevant node in solution documentation. Before assigning the documents, you should select the change document as shown in the screenshot below. This means that the documents assigned in solution documentation are now available in the assignment block Solution Documentation of the change document.
Alternatively, you can attach the documents at the assignment block Attachments in the change document. However, this is not recommended because you store the same document in two different places.

**Note:** SAP recommends a complete review and finalization of the documents before they are assigned to the solution documentation.

To assign documents to the business process structure, select the node and right click on the assignment list. Click on New → Documentation. You have different options to assign and upload a document (see the screenshot below):

When working with documents follow these guidelines:
- It is not advisable to upload different versions of the same document as separate line items in solution documentation. You should maintain the different versions within the same document using the option Check Out/Check In or Upload New Version. To Check Out/Check In or Upload New Version, right click on the document in the object assignment section of solution documentation.

- Check Out a document when you perform changes. When the document is checked out, no other user can edit the document. Then Check In the document and maintain the version details.

- If the document is updated using Check Out/Check In or the option Upload New Version, you can see the version history. To check the history, right click at the document and select Display History.

**Note:** You can search for the attached documents in solution documentation by entering the search term in the field highlighted below:

![Image showing search functionality](image)

You can also choose between **Basic Search** and **Advanced Search** as shown below:
4.1.4. Design of customer adaptions

The new requirements and gaps are analyzed by the IT team. Once the solution architect reviews the requirements and gets them approved, the IT team starts working on the detailed functional and technical design.

The usual approach is:

- All the changes to be done in the SAP S/4HANA system are documented as business requirements and IT requirements.
- All the changes to be done in the SAP Solution Manager 7.2 solution documentation are documented as business requirements and IT requirements.
- If a PPM project is used, IT requirements are assigned to tasks. The status of tasks and the overall project status can be seen in the generated reports.

Alternatively, change documents can be created directly for solution documentation changes that have no direct impact on the SAP S/4HANA systems. Examples of such changes are: renaming the process steps within process management or adapting process models for better alignment with the customer business.

The technical and functional design are documented using the standard or custom document templates. These documents are then assigned to the IT requirements. The documents provide the specification for developers and functional consultants. You assign the documents to the relevant node in solution documentation and link the IT requirement as Related Document to the document and business process structure. The documents will then be available in the assignment block Solution Documentation of the IT requirement. This is explained in the previous section.
You can also attach the documents in the assignment block *Attachments* as shown below:

The solution architect reviews the technical design of the requirement and decides when it is complete. The status is changed to *Submitted for Implementation*. At this point, the type of change document required is added as a scope to the IT requirement. The IT requirement status is changed to *Implement* to generate the change documents. The design documents attached to the IT requirement are copied over to the generated change documents. These change documents are then used in the realize phase of the implementation project.
A summary of the steps to follow during the explore phase are as follows:

1. Create a business requirement.
2. Attach documents describing the requirement in the tab *Attachments* of the business requirement.
3. Complete and prioritize the business requirement and change the status to *Handed over to IT* which will create an IT requirement.
4. Analyze the requirement, complete the solution design and estimate the effort. Document this in the IT requirement.
5. Decide which requirements will be a part of the project scope.
6. Attach documents describing the solution, such as functional and technical specifications to the relevant business process structure in solution documentation and link the IT requirement as *Related Document* against the document and business process structure. Alternatively, you can assign the documents in the assignment block *Attachments* of the IT requirement.
7. Once the solution design is approved the status is changed to *Submitted for Implementation*.
8. If PPM is being used, assign the business requirement or IT requirement to a PPM task.
9. Choose the type of the change document necessary for the implementation in the assignment block *Scope* of the IT requirement.
10. When the IT requirement status is changed to *Implement*, the change document is generated.
4.2. **Finalize test strategy**

In a new implementation, the importance of adequate testing cannot be underestimated. The testing strategy should be finalized as early as possible. The project team should make a decision on:

- The different types of testing required, for example, Unit Tests, Integration Tests, User Acceptance Test, and Regression testing and the relevant test scripts.

- The tools and the content to be used. For example, for test management, Test Suite in SAP Solution Manager 7.2. For testing, Component Based Test Automation Tool (CBTA), SAP Test Automation and Optimization (SAP TAO) or any other tool. More information on test suit in SAP Solution Manager 7.2 can be found [here](#).

- The process for handling defects raised during testing.

With the import of SAP Best Practice packages into SAP Solution Manager 7.2, standard test scripts are available. These test scripts can be accessed as shown below:

![Solution Documentation](image1)

On selecting the document name, the system takes you to an SAP web page, where the test scripts can be accessed.
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Note: To use the SAP Best Practices test scripts in the SAP Solution Manager 7.2 Test Suite, you must first download the documents and then upload them in the same process structure node but within the group Test Cases.

During the realize phase additional test scripts will be created and stored in SAP Solution Manager 7.2.
5. Realize

The purpose of this phase is to implement the business and process requirements defined during the explore phase, perform testing and produce the end user training. Refer to the SAP S/4HANA roadmap in the roadmap viewer or SAP Activate JAM page for a general overview of realize activities including data migration, cutover strategy and training of the end users.

The list below provides a summary of the activities undertaken that involve SAP Best Practices and SAP Solution Manager 7.2:

1. Create change documents as IT requirements are implemented.
2. Define the end to end business process structure in SAP Solution Manager 7.2, including the creation of new processes and process steps, update of process diagrams and assignment of configuration building blocks and documents. All these changes are saved as a part of a change document.
3. Perform the relevant configuration and developments in SAP S/4HANA development system. These changes are saved as a part of the change documents.
4. Complete the unit testing of the configuration and developments in SAP S/4HANA development system and rectify any defects.
5. Assign the new developments, executables and documents to the appropriate business process structure node in SAP Solution Manager 7.2. Select the relevant change document while doing the object assignments in solution documentation.
6. Process the change documents and move the SAP S/4HANA transports to the quality assurance system.
7. Perform the integration testing and user acceptance testing in the SAP S/4HANA quality assurance system. Adjust solution documentation if required.
8. Prepare end user training.

5.1. Change documents and types of change

In the explore phase, we discussed the creation of business requirements and IT requirements to capture the new requirements and gaps. The solution architect defines the type of change documents required for implementation in the IT requirement. You can also define the type of change documents required for the implementation during the realize phase. Change documents are used to:

1. Capture the transportable changes in SAP S/4HANA development system and move them across the system landscape.
2. Capture the solution documentation changes in the development branch of the solution in SAP Solution Manager 7.2 and release these changes to the production branch.

The table below lists the types of changes, their impact on the system landscape and the change document types used for handling these changes during the implementation:

<table>
<thead>
<tr>
<th>Type of change</th>
<th>Impact on SAP S/4HANA</th>
<th>Impact on SAP Solution Manager 7.2</th>
<th>Type of change document</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mapping of solution documentation structure and content with your organization's business and SAP S/4HANA.</td>
<td>No</td>
<td>Yes</td>
<td>Administration change document</td>
</tr>
</tbody>
</table>

Required for capturing the solution documentation changes in SAP Solution Manager 7.2.
<table>
<thead>
<tr>
<th>Type of change</th>
<th>Impact on SAP S/4HANA</th>
<th>Impact on SAP Solution Manager 7.2</th>
<th>Type of change document</th>
</tr>
</thead>
</table>
| Configuration and developments in SAP S/4HANA with and without an impact on the business process structure in SAP Solution Manager 7.2 | Yes                            | Yes, Involves: 1. Solution documentation changes such as creation of new processes, process steps and process diagrams. 2. Assignment of documents, developments and new executables to the business process structure. | Normal/Urgent change document  
Required to capture the transport requests in SAP S/4HANA and solution documentation assignments in SAP Solution Manager 7.2.  
Administration change document  
An alternative to the normal change document for capturing the solution documentation assignments in SAP Solution Manager 7.2. |

The table below summarizes the list of activities and the systems involved for each activity:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Managed System (SAP S/4HANA)</th>
<th>Managing System (SAP Solution Manager 7.2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business process structure changes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Business process structure documentation</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Configuration adaption</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Documents for configuration adaption</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Application development</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Documentation for developments</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

5.2. Generation of change documents
When the status of an IT requirement is set to Implement, the change documents defined in the assignment block Scope are generated. To navigate to the change document, click on Transaction ID in the assignment block Scope within an IT requirement.
Transportable changes are captured as a part of normal and urgent change document. To create transport requests, set the status of the normal/urgent change document to *In Development* and navigate to the assignment block *Transport Management*. Then click on the button highlighted in the screenshot below:

Within a normal and urgent change document, you can create transport requests of the type customizing for configuration and workbench for developments.
Tip: Maintain the correct description while generating the transport requests. This helps to identify the transport requests, especially when there are multiple transports created by the same developer.

Note: SAP S/4HANA and SAP Solution Manager 7.2 solution documentation changes can be captured in the same normal or urgent change document. When deploying the transport requests to the SAP S/4HANA production system, SAP Solution Manager 7.2 ensures the release of all solution documentation changes to the production branch of the solution.

Select the change document within the solution documentation to capture the changes as highlighted in the screenshot below:

You can also assign the relevant solution documentation node to the change document in the assignment block Solution Documentation.
While undertaking configuration and developments, you should define the end to end business process structure in SAP Solution Manager 7.2. The typical activities are:

1. Before the start of configuration in SAP S/4HANA, define new scenarios, processes and process steps, based on the new requirements and gaps identified in the explore phase. You can also use the existing process steps from the library and rename them as required.

2. Assign relevant documents to the business process structure.

3. Check configuration units assigned to the process and process steps. You can use the SAP Best Practice assignments, assign additional configuration units from the library or define new configuration units.

4. Check executables assigned to the process steps. You can use the SAP Best Practice assignments, or assign additional executables from the library.

5. Assign developments that have been created in the library.

The two root nodes in solution documentation are *Business Processes* and *Libraries*. They contain these entities: folders, scenarios, processes, process steps, executables, developments, interfaces and configuration units.
The entities defined in the *Libraries* can be referenced in multiple business processes in the solution. The entities defined within the *Business Processes* are specific to your organization's solution and use the entities in the library. The table below summarizes the solution documentation entities and explains their behavior in the library and business processes.

<table>
<thead>
<tr>
<th>Solution documentation entity</th>
<th>Libraries</th>
<th>Business Processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Folder</td>
<td>Not applicable</td>
<td>Created in <em>Business Processes</em> only</td>
</tr>
<tr>
<td>Scenario</td>
<td>Not applicable</td>
<td>Created in <em>Business Processes</em> only</td>
</tr>
<tr>
<td>Process</td>
<td>Not applicable</td>
<td>Created in <em>Business Processes</em> only</td>
</tr>
<tr>
<td>Process steps</td>
<td>Defined in the <em>Process Steps Library</em>. You can maintain the attributes and assignments in the library and they are available in the referenced content.</td>
<td>Referenced from the library. You can maintain the solution specific attributes and assignments. These are not visible in the <em>Process step Library</em>.</td>
</tr>
<tr>
<td>Executables</td>
<td>Created in <em>Executables Library (UI)</em></td>
<td>You can reference the executables in the business process structure.</td>
</tr>
</tbody>
</table>
If you create a new process step, executable, development or configuration unit in Business Processes, you will be rerouted to the respective library. SAP recommends you follow a new naming convention for new configuration units and process steps in the library or while modifying the existing configuration units, process steps, executables or developments in the library. This allows you to differentiate between the content delivered as a part of the SAP Best Practices and your own content.

When working with documents follow these guidelines:

- It is not advisable to upload different version of the same document as separate line items in solution documentation. You should maintain the different versions within the same document using the option Check Out/Check In or Upload New Version. To Check Out/Check In or Upload New Version, right click on the document in the object assignment section of solution documentation.
- Check Out a document when you perform changes. When the document is checked out, no other user can edit the document. Then Check In the document and maintain the version details.
- If the document is updated using Check Out/Check In or the option Upload New Version, you can see the version history. To check the history, right click at the document and select Display History.

### 5.4. Implement solution in SAP S/4HANA

Usually, the end to end business process structure is defined in SAP Solution Manager 7.2 before you start the configuration and developments.

For on premise SAP S/4HANA implementations, you should complete configuration using the IMG transaction /nspro. You should create the transport requests in SAP S/4HANA development system using the change documents in SAP Solution Manager 7.2. When saving configuration and developments in the development system, select these transport requests.

**Tip:** SAP recommends switching off the direct creation of transport requests in the SAP S/4HANA development system. Then you can only use the transport requests created using the change document.

**Note:** If you are not using requirement management or change request management, you should create and move the transport requests manually in SAP S/4HANA development system. To maintain the system consistency during a manual movement of the transport requests across the SAP S/4HANA system landscape, you should maintain the sequence of the transport requests in an Excel.
Complete the unit testing of the configuration and developments. The unit testing results should be captured in a document and assigned to the change document. This ensures the processors of the change document have visibility of the test results.

After the completion of the development activities, you should assign the executables and developments to the relevant node in solution documentation. While doing this assignment, ensure that you have selected the change document.

You should document the configuration and developments undertaken. Select the appropriate change document and attach these documents to the business process structure node in solution documentation.

5.5. Test solution

Unit testing, integration testing and user acceptance testing are undertaken during the realize phase. The testing strategy should have been finalized during the early stages of the implementation. This includes the testing tools to be used, the different types of testing to be conducted and the defect management process.

You can use the test suite in SAP Solution Manager 7.2 which provides the capabilities below:

Further information about test suite in SAP Solution Manager 7.2 can be found [here](#).

To create the test scripts, either start from scratch or begin with the standard test scripts provided with the SAP Best Practice content. To use the standard test cases in SAP Solution Manager 7.2 in Test Suite, download the documents and then upload them again in the appropriate process structure node within the group Test Cases. You have to adapt the standard test cases as per your business process. See section on testing in the Explore phase for more detail.

For new requirements, test scripts are created from scratch. These test scripts can be assigned to the relevant business process structure in Solution Documentation. To do this, navigate to the SAP Solution Manager 7.2 Fiori Launch Pad and select the tile Solution Documentation in Project and Process Management. Select the solution and navigate to the required node in the business process structure.

You should assign the testing documents as elements of the corresponding process or process step with the type Test Cases in solution documentation. Right click on the assignment list within the selected node and select New → Test Cases. The user can assign or upload existing test documents or create new test documents using templates.
5.6. Transport solution to quality assurance system

After the unit testing is completed, you should transport the configuration and developments to the SAP S/4HANA quality assurance system where integration testing and user acceptance testing is conducted.

The transport requests assigned to the change documents are moved to the SAP S/4HANA quality assurance system. You should execute the action Confirm successful test in normal change document or the action Set status to “To Be Tested” in urgent change document to move the transport requests to the SAP S/4HANA quality system. In a normal change document, you trigger the import of the transports to the quality environment in the tasklist of the phase cycle. However, in an urgent change document, the import is triggered automatically in the backend.

More information on normal change document processing can be found here. You will also find information on the processing of urgent change document here.

Tip: The assignment block Landscape in the change document provides you the status of the transport request release from the SAP S/4HANA development system and its import into the SAP S/4HANA quality assurance system.

5.7. Reporting

You can generate multiple reports to track the implementation of new requirements and gaps. This section provides information on the reports available.

5.7.1. Project management reports

You can generate a report on the progress of the IT requirements and change documents using PPM project management. To do this, all the IT requirements and change documents should be assigned to the tasks within the PPM project.
SAP Activate uses a three-level hierarchy of phase, deliverable and task. The PPM project reflects this hierarchy. To define new tasks, select the required deliverable node and then click on the button highlighted below:

Assignment of an IT requirement, request for change or the change documents to the task is determined by the task type selected. You can choose the task type from the drop down as shown below:

In the tab *Transactions*, click on *Assign Transaction* to assign the IT requirement, request for change or change document to the task.
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Note: The change cycle maintained in the IT requirement, request for change and change documents should be the same as the change cycle maintained for the PPM project. This is explained in the chapter Assign change cycle to PPM project.

To generate report, click on Additional Information highlighted below.

In the side pane, the status overview of the assigned transactions is displayed.
5.7.2. Solution documentation reports
You can get reports on the changes in solution documentation. Select the tile Solution Documentation in SAP Solution Manager 7.2 Fiori Launch Pad.

In the List view of the solution, you can filter the data based on change documents, change status and attributes.
If you select *Change Documents* in *Filter by*, all the change documents associated with the solution are listed.

If you select *Change Status*, the system provides you with the three options listed below:

- **Changed**: a list of all the nodes changed within the solution documentation.
- **Unchanged**: a list of all the unchanged nodes in solution documentation.
- **Created**: a list of all the new nodes and assignments, such as, documents, configuration units, processes and process steps created in the solution.
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Note: If multiple SAP Best Practices are imported into SAP Solution Manager 7.2. The option Changed within Filter by includes the list of nodes changed by the import of the second SAP Best Practices package.

When you select the Filter by attribute, the system lists all the attributes that can be used to group the solution documentation content.
5.7.3. **Requirement management and change management reports**

You can get reports on business requirements, IT requirements, change documents and requests for change. First, navigate to the SAP Solution Manager 7.2 Fiori Launch Pad.

For requirements management reports, click on the tile *Requirements Management* in *Project and Process Management*.

For the change request management report, go to the tile *Change and Release Management* within *Change Management*. 
First, specify the search criteria. Click on the drop down highlighted below and select your criteria. Click on Search to see the Result List.

You can also display the reports as pie charts and bar charts. After the data is listed in the Result List, click on the button highlighted below.
Scroll down and select the data to be shown in the graphical report.

The report can be exported into Microsoft Excel and saved. Click on the button highlighted below to export the report.
5.8. Prepare end user training

End user training material on the new solution and new business processes is created during the realize phase to be ready for delivery of end user training in the deploy phase. Usually, solution specific test scripts and process diagrams are produced using the standard SAP Best Practice content as a starting point. These are used to produce unique end user training material.

1. Navigate to the solution from the tile *Solution Documentation* in SAP Solution Manager 7.2 Fiori Launch Pad.

2. Select any of the business process and search for relevant documents in the object assignment section.

3. The standard SAP Best Practice documents are grouped as *Documentation* of type *Document (Best Practice)*. This is highlighted in the screenshot below:
14. Click on the name of the document. This takes you to a new screen. This screen contains the standard process diagram and test script for the selected business process.

15. If you have created your own unique process diagrams, go to the object assignment section of the selected process, search for the group **Diagrams**. Click on the Name within the line item as shown below:
6. **Deploy**

During the deploy phase, the solution, supporting tools and processes are made ready for the SAP S/4HANA production go live. This includes system tests, execution of end-user training, system management, data migration and other cutover activities. Refer to the SAP S/4HANA roadmap in the roadmap viewer or SAP Activate JAM page for a general overview of deploy activities.

This reference guide covers the transport of the solution to the production system because this involves SAP Solution Manager 7.2.

**Note:** In this phase, you should plan and complete the end-user training. This can be achieved using the training content created at the end of the realize phase.

### 6.1. Transport solution to production

After the completion of testing, you should transport the entire solution to production. Solution documentation in the development branch of SAP Solution Manager 7.2 is transported to the production branch in SAP Solution Manager 7.2. Transport requests in SAP S/4HANA quality assurance system are transported to and SAP S/4HANA production system.

#### 6.1.1. Release solution documentation to production branch

The solution documentation changes can be saved in an administration, normal or urgent change document. Depending on the change type chosen, you can release the solution documentation changes to the production branch of the solution by doing the following:

- Set the status of the normal or urgent change document to *Imported into Production*, or
- Set the status of the administration change document to *Completed*.

#### 6.1.2. Move transports to the SAP S/4HANA production system

You should process the change documents to move the transport requests to the SAP S/4HANA production system. In case of normal change documents, the transport requests are imported using the tasklist. Navigate to the tile *Change and Release Management* in SAP Solution Manager 7.2 Fiori Launch Pad. Click on *Change Cycle* within *Search in Change Request Management* as shown below. Search for the change cycle associated with your solution.
Navigate to the assignment block *Related Transactions* and click on the *Transaction ID* for the tasklist.

In the tab *Transport Requests* of the tasklist, you can see the list of transport requests associated with the phase cycle.
To import the transport requests, go to the tab **Task List** and execute the task **Schedule Import Job for Transport Requests**.

To import transport requests using urgent change documents, set the status of the change document to **Import change to production system**. Then, SAP Solution Manager 7.2 schedules the job in the SAP S/4HANA system landscape to import the transport requests to the production system.