Plan and Prepare

the technical upgrade to SAP Solution Manager 7.2
Recommended Upgrade Documentation

Before to start with the SAP Solution Manager Upgrade Planning and Preparation, check the following documentation:

- SAP note 2227300 - Further Upgrade Information for SAP Solution Manager 7.2
- Master Guide SAP Solution Manager 7.2:
  service.sap.com/instguides
  → SAP Components
  → SAP Solution Manager
  → Release 7.2
  → 1 - Planning

- Updating SAP Systems Using Software Update Manager 1.0 SP14:
  service.sap.com/sltoolset
  → Software Logistics Toolset 1.0
  → Documentation
  → System Maintenance
  → SUM Guide
Upgrade and New Installation pre-requisites
Both are possible

You can upgrade to SAP Solution Manager 7.2 SPS01 if

- Your SAP Solution Manager 7.1 runs at least on SPS 01
- Your productively used scenarios are not impacted by functional restrictions described in the SAP note 2194918 - Release Restriction Note SAP Solution Manager 7.2.
- If software components ST-TST, ST-QCA, ST-SPA, ST-TAO or ST-OST are not installed in your SAP Solution Manager 7.1 system (ST-QCA and ST-SPA can be removed if not needed, please follow instructions in SAP note 2011192)

You may want to consider a new installation if

- Your SAP Solution Manager system is outdated, e.g. 7.0 EhP1
- Main purpose is to generate keys and download Support Packages
- None of the information contained needs to be preserved
Are you going to migrate to SAP HANA? Pros and Contras

**Solution Manager on HANA**
- HANA license is free
- First system to explore new technology
- Preparation of HANA operations

**Possible performance increase due to data handling in main memory:**
- Solution Documentation Management and Search
- Instant reporting on collected data (e.g. MAI, ITSM)

**New features:**
- Text search in Solution Documentation and ITSM without TREX
- In preparation: Real-time comparison of ITSM tickets

**Limited Transferability**
- Due to architecture differences, DB migration on SAP Solution Manager is not comparable to SAP Business Suite systems

**SAP Solution Manager 7.2 is still not optimized for HANA**
- Integrated BW will not reasonable speed up

**Higher Hardware costs**
- DB size can be reduced by archiving (EWA, older project versions, ticket history, monitoring data)
HANA DB sizing
Quick and easy approach

**Note 1793345:**
- HANA DB Size estimation = (original DB net size) + disk space for merges \( /4 \) (compression)) \( \times 1.2 \) (20% safety buffer) + 25 GB
- HANA Memory estimation = (original DB net size) \( /2 \) \( \times 1.2 \) (20% safety buffer) + 50 GB
- HANA CPU Power estimation = Current CPU consumption for DB server \( \times 3 \)

**Note 1872170:**
Includes HANA Sizing report for SAP Business Suite which is a first estimation valid for SAP Solution Manager as well.

For additional information refer to http://service.sap.com/sizing
Check Introscope EM version

- If Your CA Introscope Enterprise Manager (EM) is lower than 9.5.6, plan to upgrade the Introscope Enterprise Manager server(s) together with the SAP Solution Manager systems, see SAP Note 797147.
- For additional Information related to Upgrade and different Setup Options (HA, SSL Communication..), refer to http://wiki.scn.sap.com/wiki/display/TechOps/ISHowTo.
Landscape Planner has been replaced by Maintenance Planner.

With SAP Solution Manager 7.2, Maintenance Planner will replace Maintenance Optimizer / LMDB Product System Editor.

For additional information, please refer to:
- Maintenance Tools SCN wiki: https://apps.support.sap.com/sap/support/mp
Upgrade Tools
Software Logistics Toolset: Software Update Manager (SUM)

Using the Software Update Manager 1.0 SP14 (SUM)
you can perform

- Release Upgrade from SAP Solution Manager 7.1 to 7.2
- Applying Support Package Stacks (SPS)
- Applying Java patches

in one run!

- Use the SUM 1.0 SP14 for the SAP Solution Manager Upgrade to 7.2 SPS01 (available as a part of SL Toolset: service.sap.com/slttoolset)
- Link: Update of SAP Systems Using Software Update Manager
- Link: SUM@SCN
Free Disk Space Requirements for Upgrade Procedure with SUM

- SUM Directory: approximately 20GB
- Download Directory (temporary space requirement): approximately 20GB
- DIR_TRANS: approximately 20GB
- Shadow System: Approximately the space required for your source release instance, that is, the size of the following directory:
  - UNIX: /usr/sap/<sapsid>
  - Windows: <drive>:\usr\sap\<sapsid>
  - IBM i: /usr/sap/<SID>

For more details, refer to http://scn.sap.com/community/it-management/alm/software-logistics/blog/2015/05/18/best-practices-for-upgrading-sap-systems
Upgrade Tools
Software Logistics Toolset: Software Provisioning Manager (SWPM)

Software Provisioning Manager (SWPM) is

- The successor of SAPinst.
- Delivered as a part of SL Toolset: service.sap.com/sltoolset.
- Use SWPM for
  - Dual-stack split after SAP Solution Manager Upgrade to 7.2.
  - Additionally you can use SWPM to migrate your DB, e.g. to SAP HANA

We recommend that you first perform the dual-stack split procedure and the DB migration (optional) in a test system or in a sandbox!
Upgrade strategy

If you have more than one SAP Solution Manager system, e.g. a development, a quality assurance system and a production system, you should consider the entire system group:

- Perform the Update procedure in the same sequence in which you transport your modifications.
- The upgrade will influence the development activities, therefore dual maintenance might be temporarily necessary to ensure that your production system is supported with emergency corrections.
- For additional information refer to the general Upgrade Guide: [http://service.sap.com/instguides](http://service.sap.com/instguides) → SAP Components → SAP Solution Manager → Release 7.2 → 5 Upgrade → Update of SAP Systems Using Software Update Manager
- If you plan to enhance your SAP Solution Manager landscape with an additional system, refer to the Master Guide: [http://service.sap.com/instguides](http://service.sap.com/instguides) → SAP Components → SAP Solution Manager → Release 7.2 → 1 Planning → Master Guide SAP Solution Manager 7.2
The diagram illustrates the end-to-end process of upgrading SAP Solution Manager from version 7.1 to 7.2, including optional database migration to SAP HANA. It comprises the following stages:

1. **Prepare**
   - Upgrade
   - Stack Split

2. **(Optional)* DB Migration, e.g. to SAP HANA**
3. **Configuration and Content Activation**

*) For additional information to SAP HANA DB migration, please refer to the "Technical Path to SAP Solution Manager 7.2" guide attached to SAP note [2227300 - Further Upgrade Information for SAP Solution Manager 7.2](#).
Backup your Database during the Upgrade

We recommend to perform following DB Backups:

- Before a Downtime (as requested by SUM)
- After the technical Upgrade and Post-Upgrade Activities according to SUM Guide
- After the Stack Split
- After the DB Migration
- Before to start Productive Operations
SAP Solution Manager 7.2

Times Spent doing Technical Upgrade – experience so far

We suggest to perform the upgrade in the development system first and to transport notes and corrections.

Upgrade to 7.2

Support Package implementation

Technical downtime is similar for Support Package Stack and Upgrade
Impacted Scenarios
Applications rely on SOLAR Projects and Solutions

If you are using one of the following scenarios productively in SAP Solution Manager 7.1 you need to perform Content Activation Procedure:

- Solution Documentation
- Change Request Management (ChaRM)
- Quality Gate Management (QGM)
- IT Portfolio and Project Management (ITPPM)
- Automated Testing (SAP TAO, eCATT, CBTA and third-party test tool tests)
- Business Process Monitoring (BPMon)

If your SAP Solution Manager 7.1 was only used for monitoring services like EarlyWatch Alert, or for service delivery, like GoingLive, you can skip the content activation procedure!

The activation process can already start in 7.10 (SPS05). The coding is delivered via SAP Note 2324520

For additional information, refer to Content Activation Guide
Impacted Scenarios
Two Guided Procedures for content activation process

SAP Solution Manager 7.1

- **Activate** the parts of solution documentation, with which you want to continue work.
- Clean up and restructure your solution documentation data and to re-start with an optimized content portfolio in 7.2.
- Projects and solutions which shall be migrated have to be consistent, e.g. maintenance projects have to be checked into solution
- The old 7.1 transactions provide access to old 7.1 project and solution data in **display mode only**.

SAP Solution Manager 7.2

- **Activation**: activate selected content using Guided Procedure in SOLMAN_SETUP

**Preparation**: Select Solution Documentation Content to be activated in 7.2

**Perform Upgrade to 7.2**
Post-Upgrade Activities
Dual-Stack Split

**SAP Solution Manager 7.2 is based on SAP NetWeaver 7.4, which does not support dual-stack systems.**

**Keep DB option (easier to re-connect ABAP and Java, therefore recommended):** A Java stack reuses the existing database (MCOD)

For additional information refer to
- Technical Path from SAP Solution Manager 7.1 to SAP Solution Manager 7.2 on SAP HANA guide, attached to SAP note 2227300 - Further Upgrade Information for SAP Solution Manager 7.2
- Service.sap.com/sltoolset → Software Logistics Toolset 1.0 → Documentation → System Provisioning → Dual-Stack Split: Systems based on SAP NW 7.1 and higher

**Move DB option:** A Java stack with an additional database.

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Database Migration for SAP Solution Manager 7.2 (optional)

- The Java store is quite small.
- You reduce the operations effort if both are running on the same type of DBMS.
- It is not expected that running Java DB on HANA significantly impacts the performance.

If you plan to go for HANA we strongly recommend to migrate the both DBs: ABAP DB and Java DB.
SAP Solution Manager Configuration

- Mandatory Configuration, including System Preparation, Infrastructure Preparation and Basic Configuration
Content activation: Detailed order of activities

**Preparation**
1. Install notes 2161244, 2324520
2. Run preparation report and evaluate the results
3. Run PREPARE_ACTIVATION

**Upgrade**
1. Use SL Toolset to upgrade to SAP Solution Manager 7.2

**Activation**
1. Perform mandatory configuration in SOLMAN_SETUP
2. Perform ITPPM configuration
3. Execute guided procedure for content activation
4. Perform ChaRM configuration*
5. Perform QGM configuration*

* (if ChaRM and/or QGM is in use)
Migration for BPMon from 7.1 to 7.2

When upgrading SAP Solution Manager to 7.2 the monitoring configuration has to be migrated. The migration consists of 2 parts – migrating the configuration storage as part of the solution migration and migrating to the MAI.

It is recommended to select which solutions to migrate (do not migrate all solutions):
- Solutions with productively used BPMon configuration
- Solutions with BPMon configuration that is not yet used productively, but that will go live in the future (work in progress)

Automatic BPMon Migration
- Migration to MAI (if required), this step can already be executed on SAP Solution Manager 7.1 (SP12 or higher)
- Migration to new unified directory
- Entire migration part of the content activation
Custom Code Management Migration Scenario – integrated in SOLMAN_SETUP

There is a dedicated migration scenario in SOLMAN_SETUP on SAP Solution Manager 7.2 which covers all possible combinations to convert the data from any previous data model.

To ensure the shortest total conversion time we recommend to:

- Start the upgrade at SAP Solution Manager 7.1 SP14 since the data model difference from this level to SAP Solution Manager 7.2 is the smallest, hence the total conversion time is the shortest. Recommended: at least start from SP12
- Check your customer attributes if they are obsolete and delete obsolete attributes
- Adjust your collector for customer attributes to the new data model
- Adjust your access to CCLM tables to the new data model
Best Practices
Best Practices
Experience from the Customer Projects

- Start Landscape Planning early
- Prepare a tracking list of managed systems
- Get the users and connections opened with the customer before the project starts
- Check SLD quality and SW components of the managed systems
- Implement the latest SLD content before starting the configuration
- Ensure re-connectivity of Diagnostics Agents and SAP Host Agent availability before starting the configuration
- Check profile parameters after installation / upgrade
Support Offer
Experience SAP Solution Manager 7.2 in CAL
Test-drive for a nominal fee in your own private cloud with personalization

SAP Solution Manager product management plans to make SAP Solution Manager 7.2 available in the SAP Cloud Appliance Library (CAL) as a demo system by the start of ramp-up.

SAP plans to preload the 7.2 appliance with helpful sample projects which customers can use for their evaluation and activation efforts.

SAP provides the powerful appliance without CAL charges. Customers only need an Amazon Web Services (AWS) account to test drive the SAP Solution Manager cloud appliance for as a free trial for 30 days. Longer options are available at cost.

SAP CAL – Your Highway to SAP Solution Manager 7.2 success!

This is the current state of planning and may be changed by SAP at any time.
Additional information
Useful SAP notes

2177490 - Software Update Manager (SUM) Error in the phase : INPUT-OS-USER-PASSWORDS
2010999 - Migrating solutions from classical BPMon to BPMon on MAI
1797362 - Dual-Stack Split for Systems Based on SAP NetWeaver
2227300 - Further Upgrade Information for SAP Solution Manager 7.2
Content Activation Guide

To prepare your Content Activation, it is strongly recommended to carefully read the Content Activation guide.

This guide also contains Best Practices descriptions for Content Activation scenarios.

You can download the latest version of the guide here.