

Overview

Software Provisioning Manager 1.0 and 2.0

SAP SE – Product Management
February 2021

PUBLIC

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Agenda

- Introduction
- System Installation
- System Copy and Migration
- System Transformation
 - System Rename
 - Dual-Stack Split
- Further Information

Introduction

Introduction

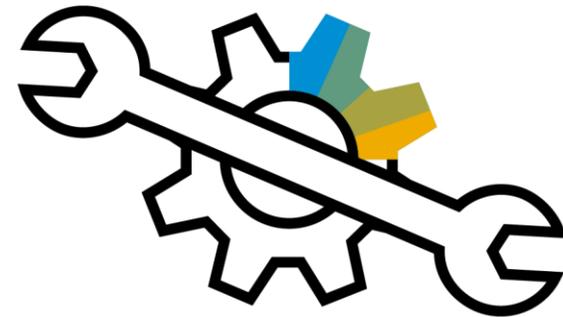
***Software Provisioning Manager* offers relevant system provisioning procedures to install, copy, and transform SAP systems in your landscape**

Since May 2018 there are 2 versions of *Software Provisioning Manager* available:
Software Provisioning Manager 1.0 and Software Provisioning Manager 2.0

Depending on which SAP Software you want to provision, you have to choose the right version.

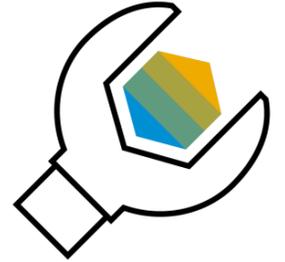
Details can be found in the relevant release notes:

- Software Provisioning Manager 1.0: SAP note 1680045
- Software Provisioning Manager 2.0: SAP note 2568783



Introduction

Basic concept

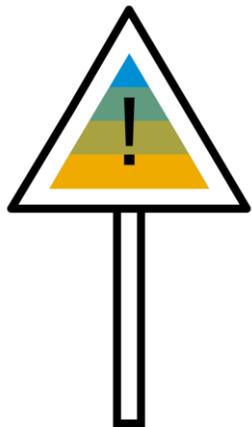


***Software Provisioning Manager* is successor of product- and release-specific delivery of provisioning tools**

- Provides latest SAPinst version with software provisioning procedures for several products + releases for all platforms, incl. backward releases
- Previous installer versions are planned to get deprecated; therefore, SAP strongly recommends to download and use latest version of *Software Provisioning Manager*, if it supports your product and release – also in case of issues with previous installer versions
- Delivered in **regular intervals, independent** from SAP application product shipments via *Software Logistics Toolset*, a central collection of software logistics tools, always up to date:
 - SL Toolset is the central place in the SAP Help Portal to find & download SL tools
 - Toolset and tools updated quarterly, product-independent, downward-compatible
 - Updates include new tools as well as recent improvements & enhancements
 - For more information and download, see SAP Help Portal at: <https://support.sap.com/sltoolset> (incl. **direct download links** for comprised tools)

Always the latest features, coverage and fixes

- SAP recommends that you always download the latest Support Package of *Software Provisioning Manager* – this way, you automatically get support of latest products, versions and platform support, including latest fixes in the tool and in supported processes
 - Use one tool version for tasks performed for a set of product versions in your system landscape
 - Latest fixes are already included



System Installation

System installation

Introduction

In your system landscape, you regularly face requirement to realize new functionality

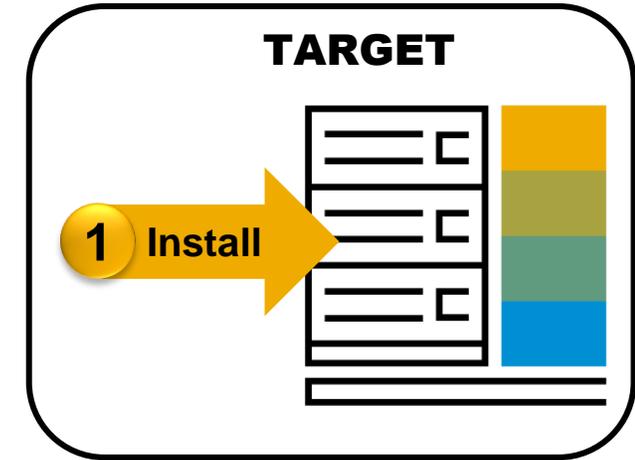
- In form of adding new systems to an existing landscape
- Or even building up a totally new landscape

For this, it is important that you can perform the procedure reliable according to your needs

- Installation on your preferred operating system/DB combination
- Installation of central system or system distributed to several hosts
- Installation of a high-availability system

Software Provisioning Manager covers supported platforms and broad range of products on both ABAP and Java technology

- Whether you are going to install an SAP NetWeaver system, an SAP Business Suite system, an SAP BW system, an SAP PI system, or a standalone engine (such as SAP liveCache), you can handle all these installations flexible and reliable on all supported platforms



System installation

Features in detail

- Support of all **SAP platforms** and many **SAP products**
 - SAP systems can run on a large number of platforms
 - With *Software Provisioning Manager*, provisioning procedures work same way on all platforms with just some minor differences (such as in parameter input phase)
- Provisioning services providing right **flexibility**
 - Our goal is to provide services with right amount of options and dialogs that install exactly the product the way you require it
 - For this, installation procedure can propose default values for certain parameters while retaining full flexibility concerning installed software
- **Distribution** options
 - Decide how you want to distribute SAP instances across systems and hosts:
 - For central system, all main instances (such as central services instance, primary application server instance, and database instance) are installed on single host
 - For distributed system, you can distribute instances to different hosts
- **High-availability** setup
 - Installation procedure enables you to optionally install high-availability systems out-of-the-box
- **Prerequisite checker**
 - Provides detailed information about prerequisites that you need to meet before you perform procedure – can optionally be run standalone to check requirements beforehand
- **Remote** procedure
 - Control procedure on a remote host from a local host by running GUI on local host

System copy and migration

System copy and migration

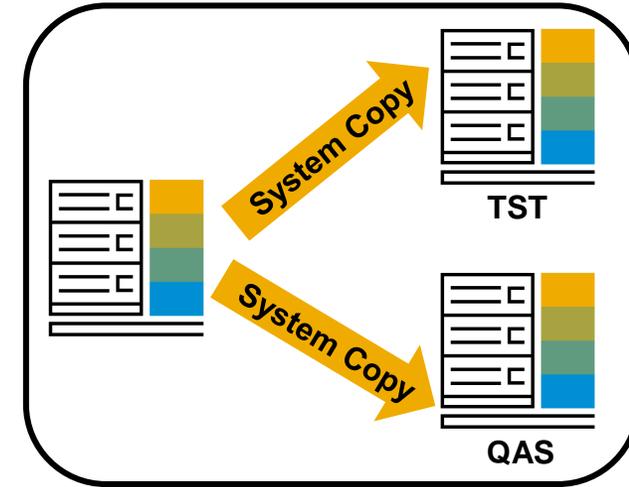
Introduction

System copies are elemental part of lifecycle of SAP landscapes:

- Create test, demo and training systems as **copy** of existing systems
- Change your operating system and/or database by **migrating** your system

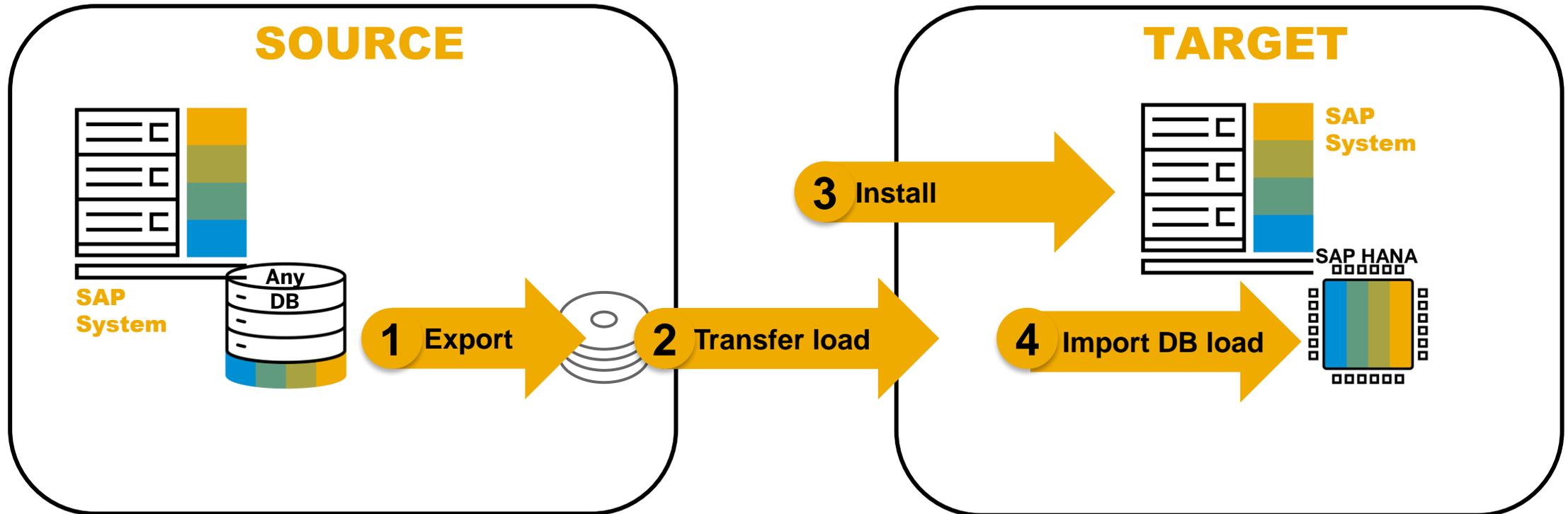
A system copy can be either homogeneous or heterogeneous:

- **Homogenous System Copy**
 - Both operating system and database system stay the same
 - Performed in most cases with database-specific procedure (database-independent procedure could optionally also be used)
- **Heterogeneous System Copy**
 - One of the following is changed during the system copy:
 - Operating system (in this case, system copy is called *OS migration*)
 - Database system (in this case, system copy is called *DB migration*)
 - Operating system and database system (in this case, system copy is called *OS/DB migration*)
 - Has to be performed with database-independent procedure (with some exceptions for certain OS migrations, where cross-platform backup-/restore is supported)



Classic Migration: Heterogenous System Copy

Process illustration (high-level)



Export database load in DB-independent format

Install target system + empty DB (without load)

Import DB load from Source System

System transformation

System rename and Dual Stack Split

System rename

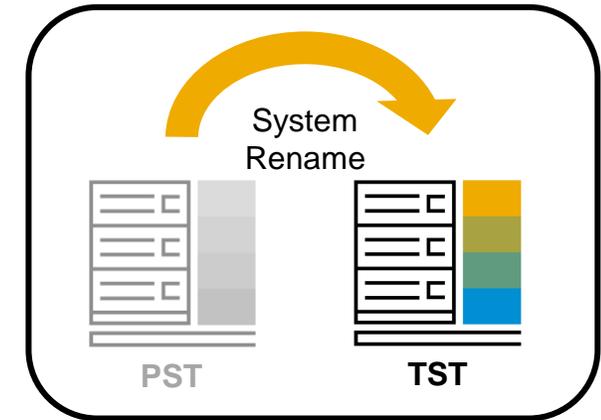
Easily adapt key characteristics of SAP systems, such as SAP system ID or host name

Main use cases:

- You want to rename an existing SAP system, such as for changing a physical host name to a virtual host name or for changing the SAP system ID
- You want to rename an SAP system created as homogeneous copy of a source system:
 - Many system landscape administrators copy existing SAP NetWeaver based systems for various reasons
 - There are different tools and ways to perform this – system rename enables a faster alternative to the classical system copy procedure
 - Copy methods supported by system rename:
 - Systems created by using backup or restore with procedures offered by Microsoft Windows
 - Systems created by using SAP Landscape Management
 - Systems provided as virtual appliance
 - Cloned systems (virtual to virtual, virtual to physical, or physical to virtual)
 - UNIX only: SAP system created as copy of file system and database of source system

Constraints:

- Rename can be performed on primary application server instances – additional application server instances have to be reinstalled
- See the *System Rename Guide* for further constraints (such as platforms, where system rename is not available)

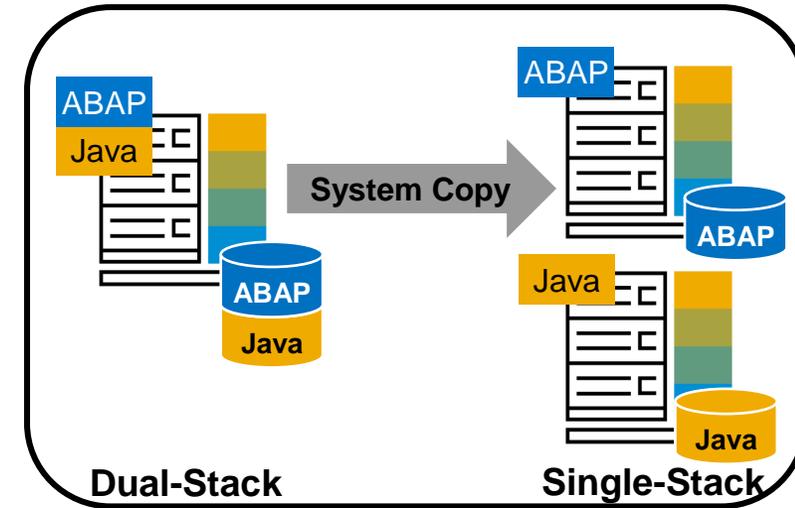


Dual-Stack

Dual Stack Split

Functionality to migrate Dual-Stack systems to Single-Stack Systems

- All Dual-Stack SAP Systems have to be migrated to Single-Stack sooner or later
- SAP HANA does not support dual stack. Dual-Stack Split is the prerequisite to migrate existing systems to SAP HANA



General recommendation:
Deploy ABAP and Java in separate systems (Single-Stack)

Dual Stack System Definition:

SAP system that contains both SAP NetWeaver Application Server ABAP and Java with following characteristics:

- One common SAP system ID (SAPSID)
- One common startup framework
- One common database

Dual stack vs. single stack

Dual-stack split procedure

1 Separation of Java stack

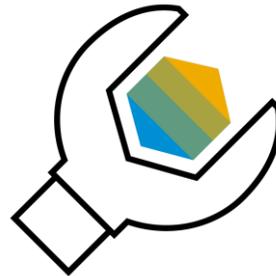
Separation of Java stack out of dual-stack source system into new system

- Export of Java stack + file system
- Optional deactivation of Java in source system
- Installation of target Java system with exported load



2 Post-split activities

Re-configuration, such as of technical connectivity between ABAP and Java – automated for certain use cases/product versions



3 Removal of Java stack from source system

- Removal of Java-related SAP system information within source system
- Can optionally be used to only remove Java stack (without split)



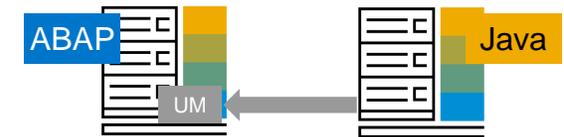
Dual-stack split

Further considerations

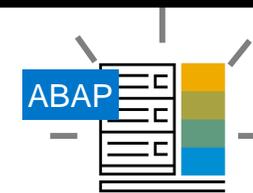
– Dual-stack split will increase number of SAPSIDs in your landscape

↑ of #SAPSID

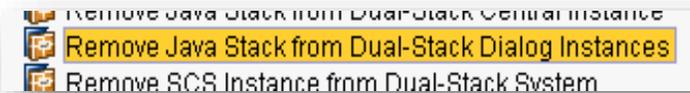
- After split, there will remain dependencies between both systems
- For example, dual-stack split procedure does not change user management (UM)



- Dual-stack split tool will not touch ABAP stack in source system (with exception of one ABAP instance profile parameter)
- No downtime for ABAP system during export



- Java stack has also to be removed from existing dual-stack dialog instances/additional application server instances
- SAP Host Agent, Diagnostics Agent and dialog instances/additional application server instances have to be installed again on new Java system, if required

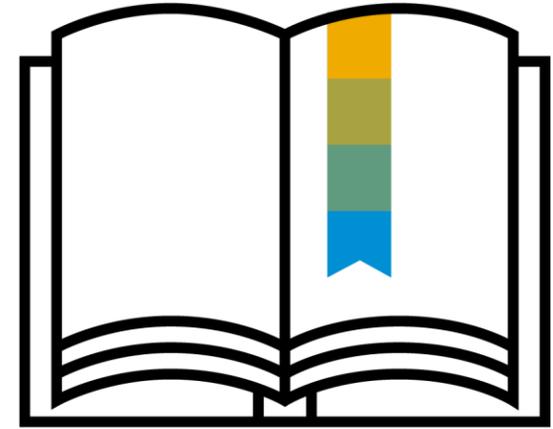


Further Information

Further information

Software Provisioning Manager

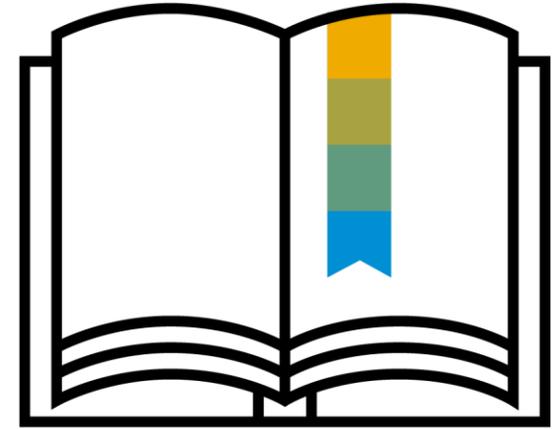
- **Software Provisioning Manager 1.0:**
 - SAP Release Note: [SAP Note 1680045](#)
 - Download of tool and documentation in SAP Support Portal at: <http://support.sap.com/sltoolset>
- **Software Provisioning Manager 2.0:**
 - SAP Release Note: [SAP Note 2568783](#)
 - Download of tool and documentation in SAP Support Portal at: <http://support.sap.com/sltoolset>
- **Software Logistics Toolset:**
 - SAP Release Note: [SAP Note 1563579](#)
 - [Blog](#) in *SAP Community Network*
 - SAP Support Portal at: <http://support.sap.com/sltoolset>



Further information

Use cases

- **Installation:**
 - [Installation](#) in *SAP Community Network*
 - **System copy and migration:**
 - [System Copy and Migration](#) in *SAP Community Network*
 - **Dual-stack split:**
 - [Dual-Stack Split](#) in *SAP Community Network*
 - [SAP Note 1797362](#)
 - **System rename:**
 - [System Rename](#), [SAP Landscape Management](#) in *SAP Community Network*
 - [SAP Note 1619720](#)
- Minimizing planned and unplanned downtime:
- [Business Continuity](#) in *SAP Community Network*



Thank you.

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Management

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