

# Mastering SAP S/4HANA Migration: Realize Phase

Prep your systems for software upgrade manager



LIVING THE TRUST

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# Introduction

In this ebook, we delve into the crucial “Realize” phase of the migration process. Building upon the foundation established in the ***previous ebook***, we explore the practical steps and invaluable insights required to successfully navigate this pivotal stage. From optimizing system configurations to implementing cutting-edge features, this guide equips you with the knowledge and strategies necessary to realize the full potential of your SAP S/4HANA migration. Join us on this transformative journey as we unlock the power of SAP’s next-generation business suite.

Upon completion of the preparatory stage, consultants commence their collaboration with the Software Update Manager (SUM) tool, designed to facilitate the conversion of the system into SAP S/4HANA. Prior to engaging with the SUM tool, consultants may have already conducted the necessary tasks using the Maintenance Planner. The stack.xml file, which is generated by the Maintenance Planner, serves as a crucial input for the SUM tool.

# SUM Pre-steps

- 1 Client 066 is the Early Watch client which was set up during the installation of your system. It is not used in S/4HANA, it must be removed before beginning the conversion.
- 2 The standard installation also setup the Client 001. You need to remove it before you start the conversion.
- 3 Dual-stack systems are AS ABAP + AS Java combined in one system. They are not supported for conversion. You have to split it before doing the conversion.
- 4 To split you can use the (1) Keep DB option, (2) Move DB option or (3) Remove Java Stack only.
- 5 Uninstall SAP Fiori Application via SAINT Tcode if there is in the ECC System.
- 6 Also need to check other pre check SUM conversion and DMO guidelines.



# Software Update Manager (SUM) - The Introduction

- SUM is the toolset for software related changes in a SAP system (i.e. upgrades, Support Package Stacks, Enhancement Packages, and conversions to SAP S/4HANA)
- In the SAP S/4HANA context, it is used to either install or update SAP S/4HANA components in a system already running on SAP HANA (i.e., Suite on HANA or SAP S/4HANA Finance) and perform the logistic conversion routines.
- In a multi-phased project, SUM can also be used to update the source software level in preparation for a HANA migration.
- The SUM has six steps—Extraction, Configuration, Checks, Preprocessing, Execution, and Postprocessing
- Note that from the Execution step, you can consider it as downtime until you close the Conversion Cockpit.

## Database migration option of Software Update Manager (DMO of SUM)

- DMO is a use case of the Software Update Manager used to consolidate the technical steps, complexity, and downtime of a combined software change and SAP HANA migration
- Implement and/or update SAP S/4HANA software components while migrating to SAP HANA in a single step when the source is Unicode.
- Alternatively, upgrade, Unicode convert (if target < 7.50), and migrate an existing system to SAP HANA in a single step, when the source is a single codepage non-Unicode system.



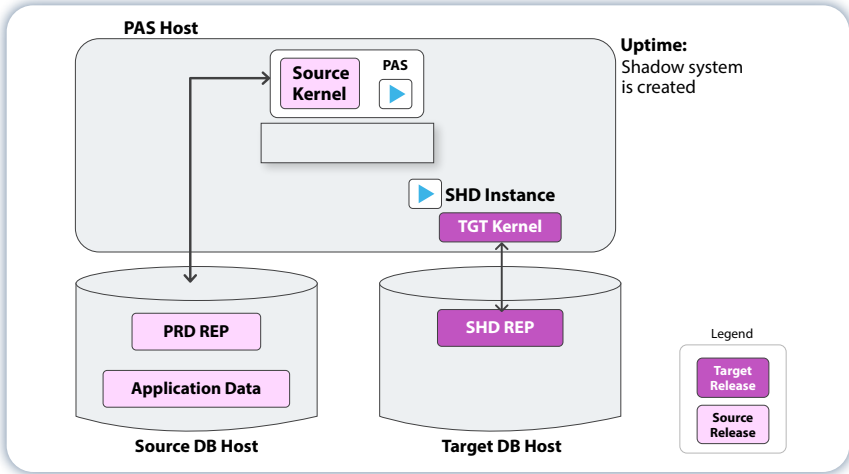
## Conversion tasks for SUM

**Software update** : Provide new applications and new tables

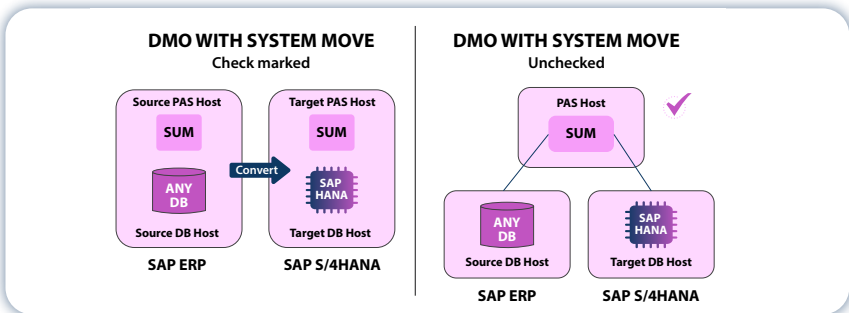
**Data conversion** : Conversion of table content to new data model

**Database migration** : Migrate to SAP HANA database (if required)

**DMO targeting 1909+** : Shadow Repository created on Target Database



The below scenario of DMO with System move is used when you move from one host to another for hardware change, TDI or VM within the same data center. It is also used to move from one data center to another or from On-Prem to Cloud (IAAS). This scenario requires new installation of S/4HANA on target prior to SUM.

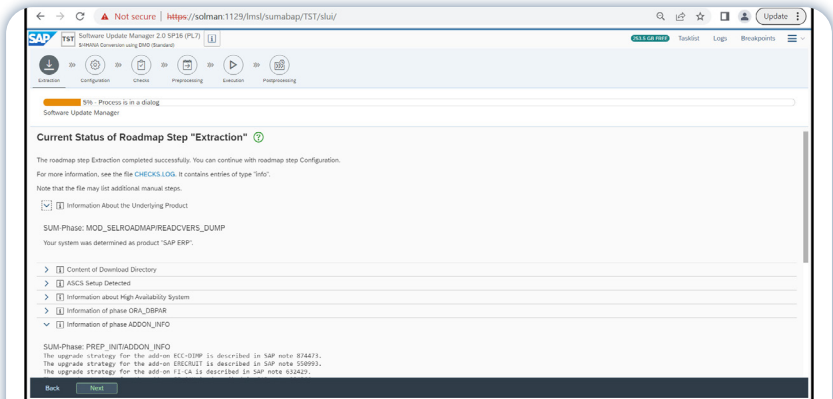


# Software Update Manager (SUM) - The Execution

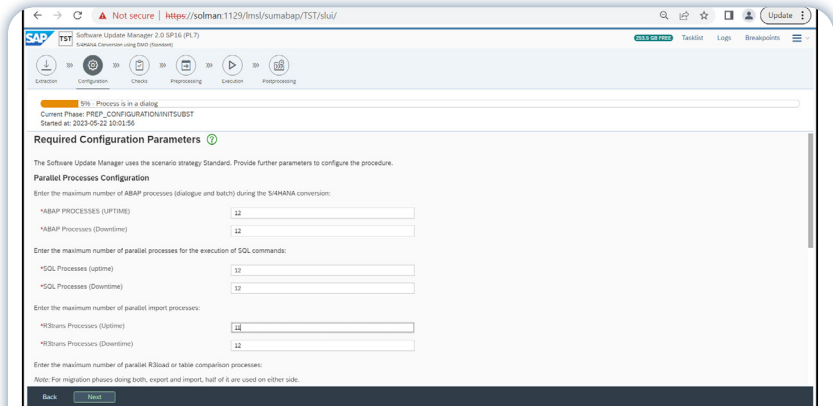
Beginning the Software Update Manager Execution

The Scenario Strategy

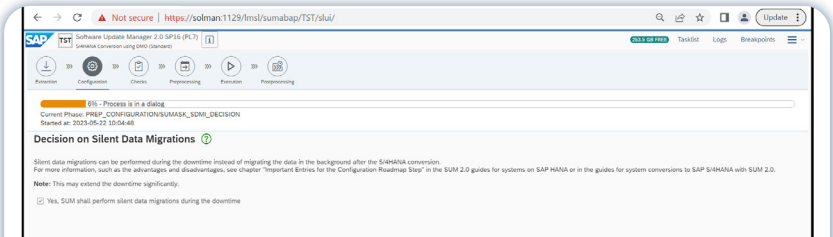
Additional Parameters for S/4HANA Conversion using DMO(Standard)



## Status of the Roadmap Step 'Extraction'



## Required Configured Parameters



## Decision on Silent Data Migrations



7% - Process is in a dialog.

Current Phase: PREP\_CONFIGURATION\_DMIGSUBMOD\_MIG\_CONFIGHDB\_MIGCONFG  
Started at: 2023-09-22 10:09:48

### Database Migration Initialization

Your system will be migrated to a new database.

Enter the following target database parameters:

Host name:

System ID (SID):

Instance number:

Target System License:

## Database Migration Initialization

13% - Process is in a dialog

Software Update Manager

### Current Status of Roadmap Step "Configuration"

The roadmap step Configuration completed successfully. You can continue with roadmap step Checks. For more information, see the file CHECKS.LOG. It contains entries of type 'Info'. Note that the file may list additional manual steps.

Configuration for Various System Changes

SUM Phase: PREP\_CONFIGURATION/ASKSWITCHES

A new kernel directory structure with platform dependent directories exists already in your system. Nothing will be changed in that respect.

A kernel replication has already been configured with program 'sapccr'. Nothing will be changed in that respect.

Your system has no longer a start profile. Nothing will be changed in that respect.

- SAP HANA Configuration for Migration from any Database
- Operating System and Database Version Check
- Stack Configuration File Overview
- Add-On Benefits Information
- Upgrade System Information
- Instances Detected in the System Landscape

## Status check of Roadmap Step 'Configuration'

15% - Process is in a dialog

Current Phase: PREP\_CHECKCHECKSPAU\_HIL\_LEVEL\_REC  
Started at: 2023-09-22 15:36:54

### Open Actions in Transactions SPDD and SPAU

Open actions in transactions SPDD and SPAU from former upgrades or support package implementations found:

Number of obsolete and non-adjusted SAP notes:	42
Number of non-adjusted modified objects:	18

#### Summary of non-adjusted modified objects:

with Modification Assistant:	0
thereof relevant for SPDD:	0
without Modification Assistant:	18
thereof relevant for SPDD:	0

#### Non-adjusted objects with active version from SAP:

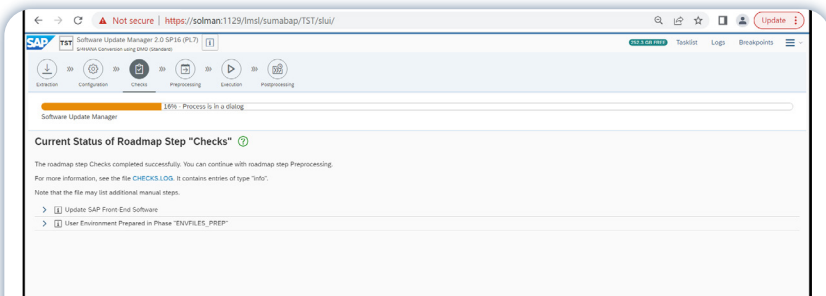
total number:	16
thereof relevant for SPDD:	0

To minimize the effort for modification adjustment, we recommend the following steps:

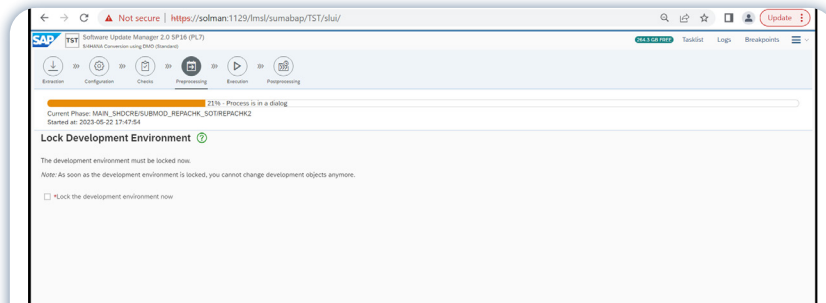
- Confirm all obsolete SAP Notes.
- Reset all objects that have been overwritten by the SAP version but are still considered as modified because they have not been adjusted.

If this is the Development system, you can use report RSUPLA\_AUTO\_JDD\_SPAU to get a list of modified objects that are possible candidates for a reset to SAP standard. Depending on the number of objects, we recommend executing the report in background. The report writes the list of candidates to a log file.

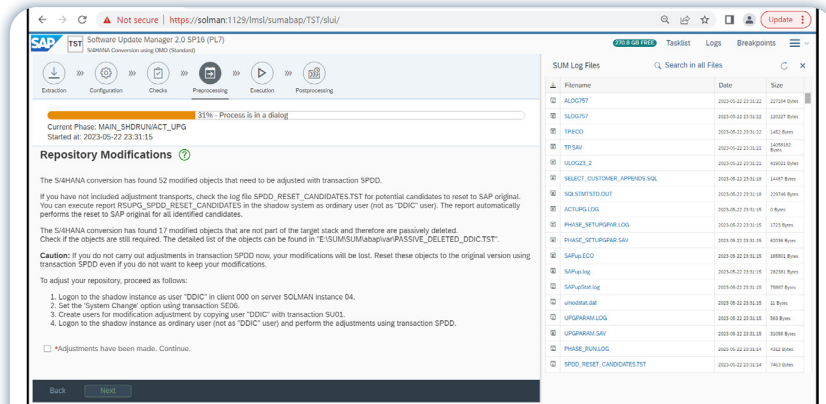
## Open Actions in SPDD and SPAU



## Status check of Roadmap Step 'Checks'



## Lock Development Environment



## Repository Modifications

## When is the SPDD activity completed?

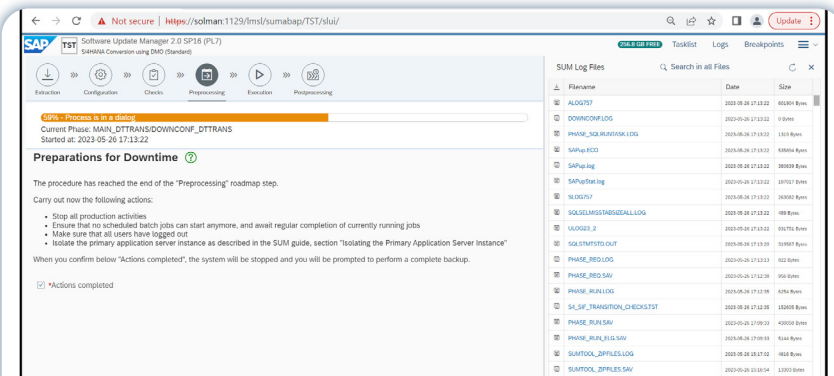
At the beginning of the SUM procedure, the ABAP consultants will take care of the SPDD modification adjustment.

*How Do Users Know When SUM Reaches Downtime and What Activities Will Be Done by the Administrator?*

When SUM reaches downtime, the consultant who runs SUM will notify the business users and other consultants working on the project, lock all users, stop batch jobs, stop all interfaces to avoid dumps, and so on. They also do some other activities and ramp down activities as specified in the SUM and conversion guides. They also take backup at this stage. That way, they will be able to go back to this stage if they make any errors. You must educate users not to log on during this downtime phase. As soon as SUM completes, users cannot post transactions. The Conversion Cockpit preparation and data migration must first be completed. If not, you'll get a similar error.

## When will the SPAU Activities be done?

The SPAU modification adjustment will be done at the end of the SUM.



The screenshot shows the SAP Software Update Manager (SUM) interface. The main content area displays the 'Preparations for Downtime' step, which is currently active. The progress bar indicates that the process is in a 'downtime' phase. The current phase is 'MAIN\_DITRANS/DOWNCONF\_DITRANS', started at 2023-05-20 17:13:22. The instructions for the administrator are as follows:

The procedure has reached the end of the "Preprocessing" roadmap step. Carry out now the following actions:

- Stop all production activities
- Ensure that no scheduled batch jobs can start anymore, and await regular completion of currently running jobs
- Make sure that all users have logged out
- Isolate the primary application server instance as described in the SUM guide, section "Isolating the Primary Application Server Instance"

When you confirm below "Actions completed", the system will be stopped and you will be prompted to perform a complete backup.

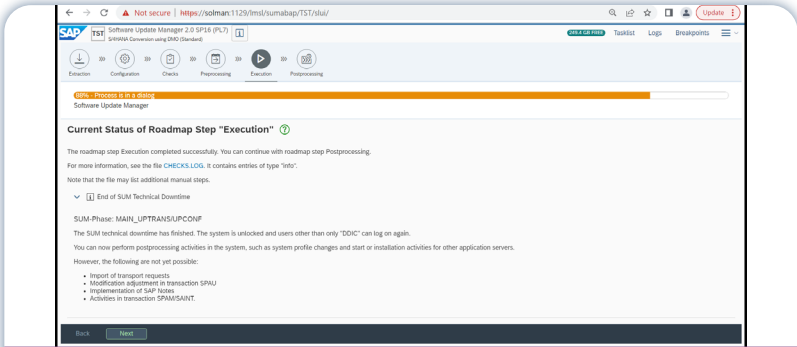
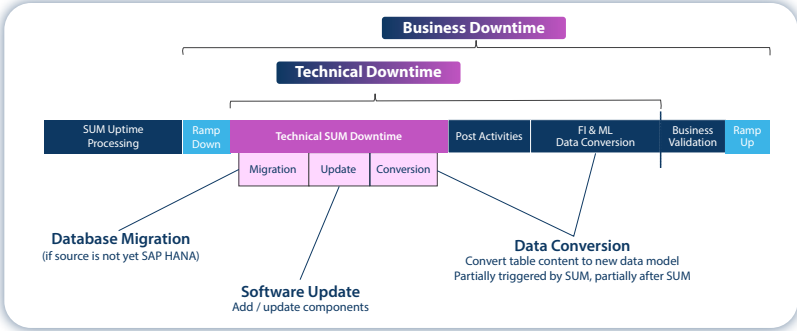
Actions completed

The right-hand side of the interface shows a list of log files with columns for Filename, Date, and Size. The log files listed are:

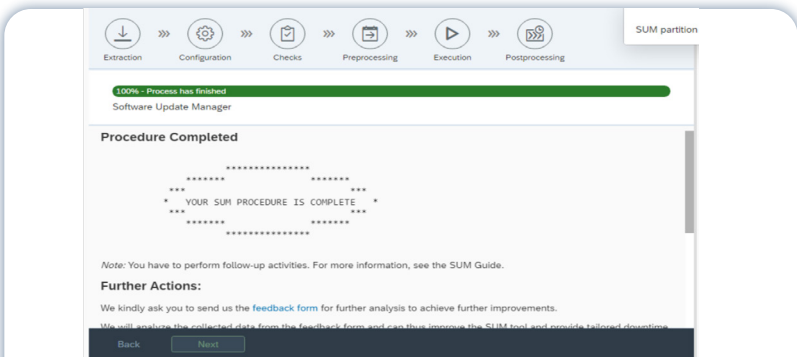
Filename	Date	Size
ALD0757	2023-05-20 17:13:22	65389 Bytes
DOWNCONF.LOG	2023-05-20 17:13:22	0 Bytes
PHWAP_SGA_RUNNING.LOG	2023-05-20 17:13:22	1318 Bytes
WAPUp ECD	2023-05-20 17:13:22	63868 Bytes
SAPUp log	2023-05-20 17:13:22	38838 Bytes
SAPUpStat.log	2023-05-20 17:13:22	18757 Bytes
ALD0757	2023-05-20 17:13:22	26368 Bytes
SOLELMGSTRBEGCALL.LOG	2023-05-20 17:13:22	189 Bytes
LOG022_2	2023-05-20 17:13:22	16176 Bytes
SQLSTARTSTO.OUT	2023-05-20 17:13:22	31967 Bytes
PHASE_REPO.LOG	2023-05-20 17:13:22	522 Bytes
PHASE_REPO.SAV	2023-05-20 17:13:22	956 Bytes
PHWAP_REPO.LOG	2023-05-20 17:13:22	6764 Bytes
SL_SF_TRANSTUNG_CHECKLIST	2023-05-20 17:13:22	182038 Bytes
PHASE_REPO.SAV	2023-05-20 17:13:22	43002 Bytes
PHWAP_REPO.SAV	2023-05-20 17:13:22	8344 Bytes
SUMTOOL_DMPFILES.LOG	2023-05-20 18:37:52	1658 Bytes
SUMTOOL_DMPFILES.SAV	2023-05-20 18:37:52	13303 Bytes

Preparations for Downtime

# Conversion Steps with Focus on Technical Downtime



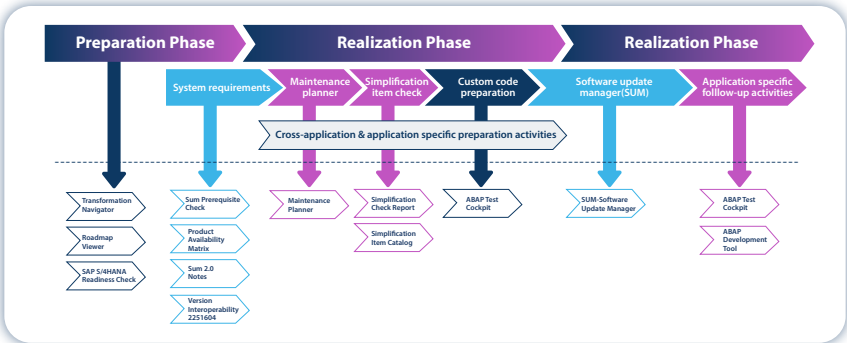
Status check of Roadmap Step 'Execution'



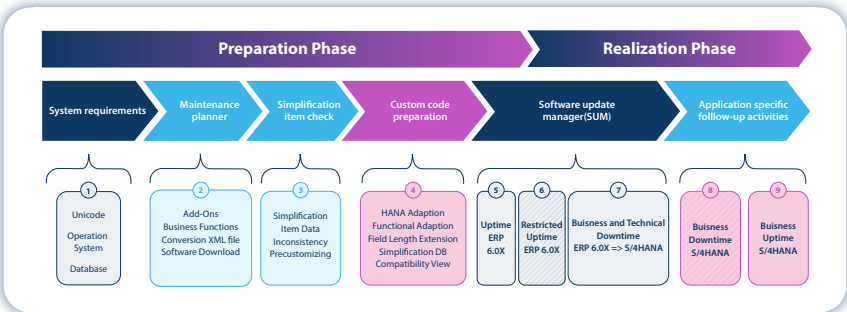
Completion of the procedure

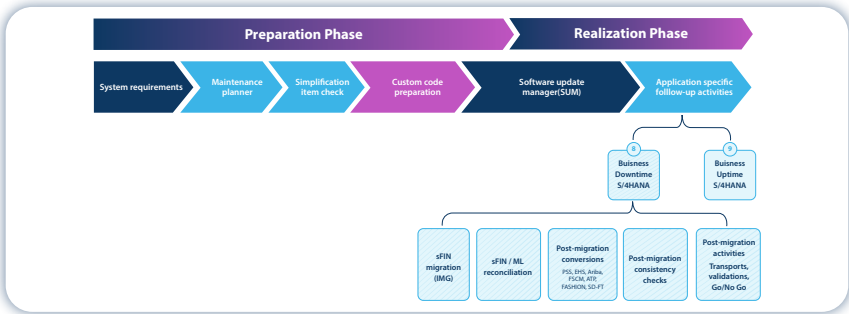
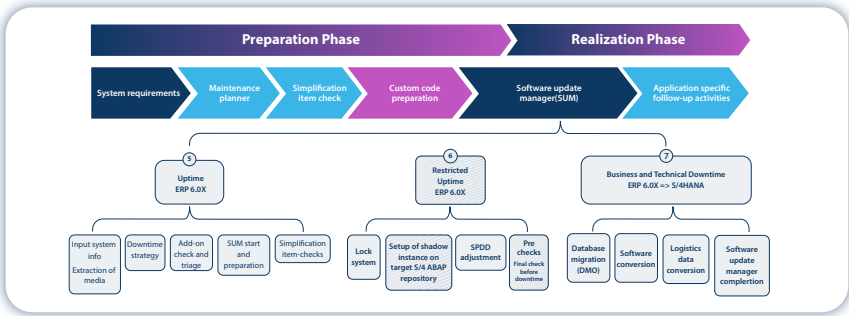
After post-processing, you can consider that SUM ends after the end of the technical downtime. But in conversion projects, after SUM, you cannot release the system for user activity, as Finance Consultants have to prepare the system for conversion and do the data migration. Post-migration activities can be done during uptime. But the ideal way is for users to not work. So, after post processing, business downtime is not finished. Users should remain locked until data migration is completed. After post processing, we will complete SUM and start preparations on SAP S/4HANA system for executing the conversion of accounting to SAP S/4HANA.

## Tool used during SAP system conversion

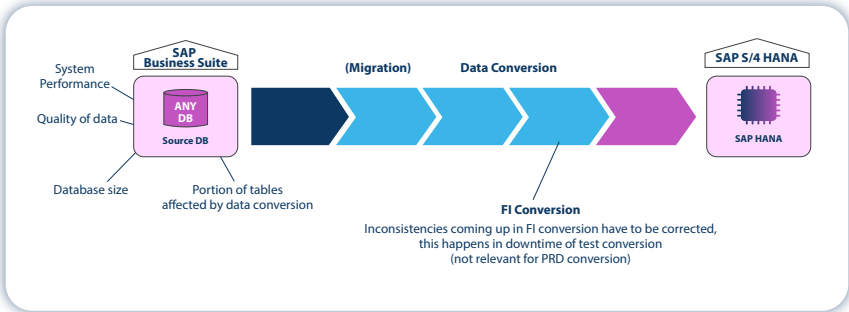


Tasks that are required to be performed





## Properties of the Source System that Impact the Technical Downtime





*We hope this comprehensive guide has provided you with valuable insights, practical tips, and a deeper understanding of this critical stage. Armed with this knowledge, you are now equipped to navigate the complexities of the migration process, optimize system configurations, and unlock the true potential of SAP S/4HANA. Remember, successful migration requires careful planning, collaboration, and continuous learning. Embrace the possibilities that lie ahead as you embark on this transformative journey towards a digitally empowered future.*

**Realize the potential of digital economy  
with SAP S/4HANA**

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