System Copy Post Processing Guide
SAP Solution Manager 7.1
Typographic Conventions

<table>
<thead>
<tr>
<th>Type Style</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example</td>
<td>Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options. Textual cross-references to other documents.</td>
</tr>
<tr>
<td>Example</td>
<td>Emphasized words or expressions.</td>
</tr>
<tr>
<td>EXAMPLE</td>
<td>Technical names of system objects. These include report names, program names, transaction codes, table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE.</td>
</tr>
<tr>
<td>Example</td>
<td>Output on the screen. This includes file and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools.</td>
</tr>
<tr>
<td>Example</td>
<td>Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.</td>
</tr>
<tr>
<td>&lt;Example&gt;</td>
<td>Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.</td>
</tr>
<tr>
<td>EXAMPLE</td>
<td>Keys on the keyboard, for example, F2 or ENTER.</td>
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Document History

<table>
<thead>
<tr>
<th>Version</th>
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<tr>
<td>1.0</td>
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# System Copy Post Processing Guide

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1 Disclaimer

This guide describes the SAP Solution Manager relevant system copy post processing steps. These post processing activities are only valid if you are planning a system copy in case of creating a new sandbox or development system.

The SAP Solution Manager is a centralized application for planning, administration and operation of a customer’s SAP landscape. Therefore, every managed system is connected to the SAP Solution Manager via different connections and frameworks as RFC, DBA, Extractor Framework or Monitoring and Alerting Infrastructure. One of the main activities in the system copy post processing is to adjust these connections to avoid interruptions or inconsistencies in the SAP landscape.

Customer specific enhancement and development cannot be considered in this guide. Please be aware of necessary post processing activities after the system copy in this area.

Furthermore, this guide is currently under construction and might not contain all necessary steps – in case of feedback or further details to be added please contact the document owner. This guide is designed only for SAP internal usage – hand over to others is not allowed.

The focus for BW configuration is the standard SAP Solution Manager BW environment (production client) – other use cases are not considered.

Managed System reconnection is not main part of this guide and will be added at a later phase. Having no managed systems connected to the system copy might lead to restrictions during test of scenarios on this system. Before connecting a managed system to the system copy please make sure that the system owner agrees to this and make sure that existing connections from other SAP Solution Manager systems are not affected by connecting a further SAP Solution Manager system.
2 Introduction

This guide is the starting point for planning system copy post processing activities.

System copies are used for:

- Setting up system landscapes (where the SAP systems have different SAPSIDs).
- Providing systems for testing, demonstration, training, standby and SAP Solution Manager 7.2 upgrade testing
- Changing the operating system, the database, or both.
- Changing the hardware.

Please note:

- To create these systems, you can either perform an initial system copy or use a database export to overwrite the database of an already existing target system (refresh use case).
- You can use different operating system releases or database releases for the source and target systems, but the SAP system release of the source and target systems must be the same.

Depending on the purpose of the system, it might be advisable to use the same SAP system ID, even though this prevents you from including the system in a system group for transports.

This guide uses the following naming convention:

- **Source System**: The source system for the system copy is one of your existing SAP Solution Manager systems. The majority of the configuration on the source system will also exist on the system copy.
- **Target System**: The target system is the result of the system copy. Post processing steps are performed after the system copy on the target system.

The SAP Solution Manager application management and administration solution supports heterogeneous system environments. Its functions cover all aspects of implementation, deployment, operation, and continuous improvement of solutions. As a centralized, robust application management and administration solution, SAP Solution Manager combines tools, content, and direct access to SAP to increase the reliability of solutions and to lower total cost of ownership.

In relation to the used SAP Solution Manager capabilities there are several system copy post processing areas. The following pictures give an overview about the relevant scenario specific chapters:
3 Planning a System Copy

You find the general system copy guidance under: https://support.sap.com/sltoolset -> System Provisioning -> System Copy Option -> Guide for Systems Based on SAP NetWeaver 7.0/7.0 EHPs -> Dual Stack (ABAP + Java)

For general recommendations on planning a new instance see: http://service.sap.com/instguides -> SAP NetWeaver -> <your release> -> Installation

Please consider that the system copy of SAP Solution Manager also contains downtimes for the source system (export phase). If the source system is a productive SAP Solution Manager, this means that scenarios like Change Request Management, IT Service Management, Application Operations, and so on will not be available during parts of this procedure.

To avoid any risks and incidents to the productive SAP Solution Manager environment it is important to prevent network communication between target SAP Solution Manager system (the copy) and the SAP system landscape (the productive landscape). There are two options available:

- an isolated network segment for the target system to avoid network interactions
- decommissioning of managed systems on the target system to clean up RFC destinations, extractor- and DBA framework connections

3.1 Further References

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<tr>
<td>General System Copy Guide “System Copy for SAP Systems Based on the Application Server Dual-Stack (ABAP and Java) of SAP NetWeaver 7.0 to 7.03”</td>
<td><a href="http://service.sap.com/instguides">http://service.sap.com/instguides</a> -&gt; SAP NetWeaver -&gt; &lt;your release&gt; -&gt; Installation</td>
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<td><a href="https://support.sap.com/sltoolset">https://support.sap.com/sltoolset</a> -&gt; System Provisioning -&gt; System Copy Option -&gt; Guide for Systems Based on SAP NetWeaver 7.0/7.0 EHPs -&gt; Dual Stack (ABAP+Java)</td>
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<td>Software Provisioning Manager Wiki</td>
<td><a href="https://wiki.scn.sap.com/wiki/display/SL/Software+Provisioning+Manager+1.0">https://wiki.scn.sap.com/wiki/display/SL/Software+Provisioning+Manager+1.0</a></td>
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4 Preparing the Source System

Perform the following preparations:

- Check the minimum kernel patch level required by the support package level of the source system
- Check scheduled or running batch job processing and suspend jobs (transaction SM37 and report BTCTRNS1)
- Clean up open or canceled update requests (transaction SM13)

Details are available in the system upgrade guideline: http://service.sap.com/instguides -> SAP NetWeaver -> <your release> -> Installation

Deactivate the synchronization of system data to SAP Support Portal, otherwise when jobs are released on the target system unplanned updates might be triggered. The synchronization can also be switched off via transaction SMSY_SYNCH_SAP_CUST. A synchronization of system data from two data sources (source and target SAP Solution Manager) causes inconsistencies in the product validation in the maintenance planner. So make sure that this synchronization stays inactive in the system copy.

To deactivate the synchronization on the source SAP Solution Manager 7.1, please de-schedule the ABAP background job LANDSCAPE_FETCH.

Additionally, please consider the steps described in the note 1797014 - System copy of a Solution Manager with a filled LMDB.
5 Executing a System Copy

Information on the execution of a system copy is not part of this guide. The following graphic shows the procedure in a schematic way as an example.

Further Information
SAP Support Portal: https://support.sap.com/sitoolset -> System Provisioning -> System Copy Option
6 Post Activities on Source System

Re-schedule the background synchronization between SAP Solution Manager source system and the SAP support backend. To do so, schedule the background job LANDSCAPE_FETCH or change settings made before in transaction SMSY_SYNCH_SAP_CUST.
7 Post Activities on Target System

The post activities on the target system can be separated into three areas:

- SAP NetWeaver relevant post activities: mainly described in the SAP NetWeaver System Copy Guide (not part of this document)
- SAP Solution Manager Basis post activities: General SAP Solution Manager post copy activities in transaction SOLMAN_SETUP
- Scenario specific post activities: Post copy processing steps to reestablish further capabilities of SAP Solution Manager

7.1 NetWeaver Relevant Post Activities

After a system copy, application log entries from the source system are not useful on the target system. This information is stored in table BALDAT. To reduce the size of the table BALDAT, it is recommended to perform a cleanup using the report SBAL_DELETE:

For archived application logs, the report SBAL_ARCHIVE_DELETE can be used:
7.2 SAP Solution Manager Basis Post Activities

The main post activity after a system copy of SAP Solution Manager is to perform the guided procedure in transaction SOLMAN_SETUP and the decommissioning of managed systems.

Please see the following references:

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The SAP Solution Manager guided procedure for configuration is separated into three areas:
- System preparation
- Basic configuration
- Managed system configuration
Every step in this guided procedure should be checked. Open or missing activities must be executed. In the following section, additional activities are mentioned.

### 7.2.1 System Preparation

Prepare the SAP Solution Manager system for further configuration by creating configuration users, configuring all necessary settings for your system landscape, as for instance connecting ABAP and Java.

#### Maintaining Users

In this step, create the necessary users for SAP Solution Manager. Use this step also to update authorizations or credentials. It is recommended to use the Update Password action instead of changing the password in transaction SU01 directly:

#### Checking Installation

The installation check step checks several configurations. The referenced system copy guide gives an overview regarding necessary tasks such as HTTPS configuration and certificate configuration.
Another step is the adjustment of profile parameters. Several system parameters are system- and host specific and need to be adjusted to the target system. Refer to the system copy guide to check which are automatically adjusted by the system copy tools and which require manual checks. Also, closely monitor actions with performance parameters. System performance parameters are correlated to the number of managed system and used scenarios. A difference between source and target system is possible.

**Specifying Connectivity Data**

In this step, the connection to the SAP Support backend is configured. At least one check is necessary to ensure a SAP-standard configuration.

**Implementing an SAP Note**

Downloading and implementing the central correction note is not required for the target system. Execute the post-processing only.

If you want to update the note, update on both systems. Otherwise, source and target system will not match, leading to potential problems if you made the system copy to practice, such as an upgrade.

**Configuring Connectivity**

In this step, a configuration of the connectivity (such as web service configuration) is performed. A check and recreation of web service endpoints is necessary in this step. Please make sure to update the web dispatcher information, as this might still point to the web dispatcher of the target system. Also, the certificate for the agents should be updated, as this is also still attached to the source system. This step is only relevant if there are already some SMD agents reconnected from the source to the java stack of the target system, which is by default not the case. As after the system copy the agents would be still connected to the source SAP Solution Manager system, additional effort is required. For the relevant managed systems/objects either new agents need to be installed or already existing agents attached to the target system (for example by using the SLD candidates feature or via the `smdsetup` script).

**Preparing Landscape Description**

In this step, you define a System Landscape Directory for the synchronization with the LMDB of the SAP Solution Manager. This contains software catalog- and technical system information.

The SLD-LMDB synchronization is one of the most important parts to ensure SAP Solution Manager functionalities.
For the system copy you can stick with the SLD of the source system, if this contains the managed systems that the customer wants to connect to the system copy. If the future managed systems are in a different SLD (such as Sandbox) you need to connect this SLD to the target system. SAP’s recommendation is to use the local SLD of the target SAP Solution Manager. If the future managed systems are in another SLD they can be forwarded to the local SLD of the system copy via an SLD bridge. If the source system was using its local SLD make sure that you correct the SLD connection parameters here. Run the setup of the local SLD for the system copy.

Additionally, a clean-up of the LMDB may be necessary. The activities for clean up the LMDB in target systems are described in chapter Error! Reference source not found.Managed System Configuration - Decommissioning.

This step also contains the connection of Diagnostics Agents. SMD agents are needed for outside discovery and the collection and relay of monitoring data from a managed system to the SAP Solution Manager.

Part of the connection configuration of managed systems (called managed system configuration; see chapter 7.2.3) is the assignment of an SMD agent to the managed system. This SMD agent needs to be connected to the target SAP Solution Manager.

As one SMD agent can only be connected to one SAP Solution Manager, install a new set of SMD agents for all managed systems that you want to connect to the target system. If a system is already connected to another SAP Solution Manager system and if this managed system is also relevant on the target system, install a second SMD agent, such as one with a new instance number on the managed system host(s).

For a detailed description of the installation and configuration of the connection of SMD agents, see the SAP Diagnostics Agent Wiki at https://wiki.scn.sap.com/wiki/display/SMSETUP/Diagnostics+Agents.

### 7.2.2 Basic Configuration

Configure all basic settings to ensure that all basic functionalities run immediately. Additionally, create a project and a related solution.

**Specify Solution**

In this step a solution is created. At least one check of the created solutions is required. As this is a system copy the solution should already exist.
Specify Users and Connectivity Data

In this step, assign a valid service user and check the credentials for this user. Verify the SAP BW settings, like checking the BI source systems. Also, the re-creation of the DPC/DCC Web Service URL is required, as well as the verification of the WEBADMIN RFC.

Configure CA Introscope

In this step, a CA Introscope Enterprise Manager instance is assigned to the SAP Solution Manager. The discovery of an Enterprise Manager requires a Diagnostic Agent. One Enterprise Manager can be connected to several SAP Solution Manager systems, by installing additional SMD agent. In any case, a connected SMD agent is required in order to perform the discovery of the CA Introscope Enterprise Manager. This action is performed in System Preparation -> Preparing Landscape Description.

Check if the currently connected (likely productive) CA Introscope Enterprise Manager can be removed from the system copy. This is the case if the source and the target system do not share any managed systems. In this case, select the productive CA Introscope Enterprise Manager and use the Remove function in this step:

In some cases, it is not possible to delete an older CA Introscope Enterprise Manager entry because the entry is used by a scenario. Please see SAP Note 2398502 - Error "This enterprise manager is used by technical system <SID>-<STACK> <SID>-<STACK>" when removing Introscope EM entry - Solution Manager 7.1.

Along with this there are known issues with secure store entries from the Enterprise Manager entry of the source system. The error message “secure store read exception: cannot find entry” appears. Therefore, the following workflow can reset the former configuration:

1. Call transaction solman_setup_admin -> Generic storage Admin UI
2. Select EM_CONFIG_ID-EM_CONFIG_ID
3. Select the old items (corresponding to connected Enterprise Manager in production)
4. Select line
5. Click on Edit
6. Select all entries and remove them
7. Click Save and confirm

After the deletion, a CA Introscope Enterprise Manager needs to be connected to the target SAP Solution Manager. SAP recommends to install a separate Enterprise Manager for the target system and discover the installation with an SMD agent.

Please note that one BC (Bytecode) agent can only report to exactly one CA Introscope Enterprise Manager and on each SAP NetWeaver AS Java system only exactly one BC agent can be deployed. This means, if you plan to connect an SAP NetWeaver AS Java system to the target system that is already connected to another SAP Solution Manager (such as DEV) you must connect the CA Introscope Enterprise Manager that is used by this SAP Solution Manager. You can connect more than one CA Introscope Enterprise Manager to one SAP Solution Manager.

To connect the existing CA Introscope Enterprise Manager on the target system, an additional SMD agent is needed. If an SMD agent is already installed and used to connect the CA Introscope Enterprise Manager to the other SAP Solution Manager, a second SMD agent is necessary.

If your future managed systems are not connected to any other SAP Solution Manager or are only ABAP-based, then you can install an own CA Introscope Enterprise Manager for the target system.

**Manual Configuration**

Review all activities of manual configuration and re-configure the relevant steps after the system copy on the target system. The configuration of rapid content delivery requires a valid HTTPS and certificate configuration. For more details see [https://wiki.scn.sap.com/wiki/display/TechOps/Rapid+Content+Delivery](https://wiki.scn.sap.com/wiki/display/TechOps/Rapid+Content+Delivery).

Rapid Content Delivery (RCD) enables the download and import of SAPs content (for example, monitoring templates). Please ensure that the same content is used on source and target system. Otherwise a new content can bring some changes to the existing monitoring. Alternatively, the monitoring content can be manually downloaded and imported. This would be a recommended approach, especially, if you anyway plan to upgrade to SAP Solution Manager 7.2, as in the new release the reconfiguration of RCD is mandatory (due to some changes in the setup).

**Automatic Configuration**

Automatic configuration must be performed after the system copy on the target system. As the properly configured and working BW client inside SAP Solution Manager is crucial for many scenarios, it is important to perform the BW specific post system copy activities - the logical system name conversion (if there was a change to the logical system name). Additional information can be found in the SAP Note 886102 and on the Wiki ([https://wiki.scn.sap.com/wiki/display/BI/BDLS+-+Logical+system+name+conversion](https://wiki.scn.sap.com/wiki/display/BI/BDLS+-+Logical+system+name+conversion)).
Part of the automatic configuration is the scheduling of background jobs. The background job LANDSCAPE_FETCH triggers the synchronization of landscape information to the SAP Service Marketplace. Make sure that synchronization settings are maintained correctly by calling transaction SM21. (For a non-productive used system choose Do not synchronize). Do not schedule this job in the target system.

Maintaining Systems in IBase

In this step the report IB_GEN is executed to create IObjects for every LMDB object. In the target system, it can be possible that not every technical system is needed as an IObject in the IBase.

To clean up the IBase follow the instructions in SAP Note 2012029 – Option 2. The report AI_CRM_PRODUCT_DELETE deletes IObjects and the associated IBase text component if they are not used in any CRM documents. It is relevant for LMDB and CMDB objects.

After the cleanup, a re-execution of the report IB_GEN is necessary to create IObjects for valid LMDB objects in the target system.

Creating Configuration Users

In this optional step, necessary SAP Solution Manager users are created. Please perform this step to update authorizations or credentials. It is recommended to use the change password action instead of changing the password in transaction SU01 directly.

7.2.3 Managed System Configuration

Unless you performed a OS, DB or hardware migration the target system is most likely not used as the productive SAP Solution Manager. For this reason, it is not recommended to connect productive managed systems or bigger parts of the SAP environment to the system copy.

In this step the connection to managed systems is deleted on the target system to avoid interruptions of the productive system landscape. Before you remove the managed production systems you should connect the sandbox systems that you plan to use with your copy. The reason why you would connect them first is, so you can replace the production systems in the logical components with the respective sandbox system during the decommissioning. By replacing the production systems in the logical components, you keep the "switch"
transparent (for example, to Business Process Monitoring setup or ChaRM projects), and have it easier to reactivate these scenarios for testing later. The actual replacement is described in the decommissioning guided procedure in step Planning Projects and Solution Clean Up.

For more information about how to connect the sandbox systems please refer to:

- Managed System Configuration: https://wiki.scn.sap.com/wiki/display/SMSETUP/Managed_Systems
- Managed System Configuration Checklist: https://wiki.scn.sap.com/wiki/display/SMSETUP/Managed_System_Checklist

SAP recommends to choose a set of managed systems for testing changes on used scenarios on the SAP Solution Manager landscape or to test planned scenarios. Please remember: if a system is already connected to another SAP Solution Manager a separate SMD Agent for the target system is needed.

Managed System Configuration

To connect managed systems to the target SAP Solution Manager system, use the managed system configuration. Depending on the focused scenarios, use the guided procedure in transaction SOLMAN_SETUP after the system synchronized the landscape data with the connected SLD.

Before you start using the Managed System Configuration, it is very important to define a scope. We recommend to connect a small number of sandbox managed systems to the target system for testing used or planned scenarios. The number of systems depends on used scenarios and focus of testing on the target system. Only connect a managed system in agreement with the system owner.

Decommissioning

The decommissioning deletes the connections and configurations between SAP Solution Manager and a managed system. Before you run the decommissioning guided procedure please make sure that you:

- Connected a sandbox system that will replace the system to be decommissioned (if there is a replacement planned, depending on your test scenario)
• Executed the system copy post processing activities for all scenarios you plan to use, such as for Change Request Management and Business Process Monitoring. Please refer to section SAP Solution Manager Scenario Specific Processing for details.

To facilitate the decommissioning, it is recommended to clean up old agent entries. Old (copied) agent entries will appear as offline agents in the SMD Agent Administration, because they are connected to the source system. Therefore, after installing and connecting all the SMD agents you need for your test landscape, use the SMD Agent Administration to delete old agent entries. To access the SMD Agent Administration, go to URL: http://<solman-host>:<solman-port>/smd/AgentAdmin. On the start page, choose Offline Agents. This will display all the offline agents and you can now remove them by selecting Remove Offline Agent Entries.

Once you are sure you can decommission the system go to transaction SOLMAN_SETUP -> Managed System Configuration -> <Select affected technical system> -> Advanced options -> Decommissioning:

The decommissioning is a guided procedure that cleans up the system landscape information on the target system:

This guided procedure contains the following steps:

Overview

In this step a confirmation of the agreement is necessary. Please read the agreement carefully:

This guided procedure decommissions managed systems from SAP Solution Manager, but you cannot use it for the SAP Solution Manager system itself.

1. If the system is in one of the following applications, contact its expert (internally, externally, or via your TQM) before you continue:
   o Business Process Operations (BPO)
   o Application Lifecycle Management (ALM)
2. If the decommissioned system is part of a dual-stack technical scenario, perform this guided procedure on both ABAP and Java technical systems.

3. In the Complete step, download the complete help texts in HTML format.
   Background: You cannot perform this guided procedure again after the technical system has been removed from the LMDB. The history of the decommissioned system is available in report AGS_SISE_DECOMM_REP (transaction SE38).

4. To avoid unexpected loss of data, proceed as follows:
   - Consider which activities you want to execute.
   - Perform the steps, depending on how deep you want to clean up the system to be decommissioned. Not all steps are mandatory.
   - Execute the steps in the sequence of this guided procedure. Some activities are only enabled after some other activity has been executed. In such cases, you still execute the activities in sequence where possible. In some cases, a manual activity instructs you to execute a preceding activity that could previously not be executed.
   - Read the help texts associated with each step or activity.

5. To confirm you have performed the steps and agreed with the conditions of use, in the Execution Status column, select Performed.


Application Clean up

In this step the system monitoring, the sessions and reports, and the exception management settings are deleted automatically. Additionally, there are manual activities that need to be executed.

Perform all activities for the system you want to decommission.

Cross-Application Clean up

In this step things used across applications like the extractors, the DBA Cockpit connection and RFC destinations are deleted for the managed system. In addition, there are automatic and manual clean-up activities.
Caution: Be careful with the automatic activity for the RFC removal. This automatic activity removes RFC destinations on the managed system to the source SAP Solution Manager (the BACK RFC). It also removes the RFC users used by the production SAP Solution Manager RFC destinations. These RFC users and the BACK RFC are needed on the source SAP Solution Manager system. Hence do not run this activity here but rather go to transaction SM59 and manually remove or disable (such as `XX` on the end of the hostname) the RFC destinations.

The other activity you shouldn’t perform is the removal of the Diagnostics agent. It is still used to connect the managed system to the source system (the production SAP Solution Manager). So, it is still needed and should not be removed.

The rest of the activities you should perform.

Planning Projects and Solution Clean Up

There are two manual activities in this step: Clean-up of Projects and Solutions and Clean Logical Components.

Here you replace the production systems in the logical components with the respective sandbox systems.

Software Lifecycle Management Clean Up

In this step, there are two manual activities: The deletion of product systems on the target system and the cleanup of the data in SMP.

Do not delete product data in SAP Service Marketplace. This data is delivered from the target SAP Solution Manager and it is needed for daily operations. The synchronization to the SAP Support Portal is triggered by the
LANDSCAPE - FETCH background job. This job must be unscheduled on the target system to avoid inconsistencies in SMP. Find the job in transaction SM37 and set it from released to scheduled. This will prevent it from running.

Landscape Management Clean UP

Landscape Management clean up consists of the following manual steps:

1. Deletion of technical system in LMDB: This can be useful if you prefer a clean LMDB. In case the LMDB system entry is part of the content activation in case of an upgrade to SAP Solution Manager 7.2 you cannot delete it.

2. Deletion of the technical system in SLD: chapter 7.2.1 -> Step Prepare Landscape Description, this step is not necessary on the target system, if the SLD of the source system is not in use on the target system.

Do not delete LMDB data on the target system or clean up SLD entries on the SLD that is used on the source (production) system.
7.3  SAP Solution Manager Scenario Specific Activities

7.3.1  Cross-Application Settings

Consider the following cross-application adjustments:

IBase: General cleanup. Rather than just a check for duplicates, consider removing systems not maintained any longer as managed systems. (Please refer to the decommissioning part of the Managed System Configuration chapter for details.)

User: Cleanup of users. As a related option, consider removing unnecessary dialog users.

Business partners: Cleanup of business partners.

Organizational model: Cleanup/Adaption.

Multilevel categorization: Cleanup/Adaption.

Hierarchy: Cleanup/Adaption.

Customer numbers and installation numbers: Cleanup/Adaption.

AISUSER: Cleanup/Adaption.

Number Ranges: Adaption.

7.3.2  SAP EarlyWatch Reporting

SAP EarlyWatch (EWA) reporting manages the creation and service delivery of EWA documents. RFC connections and SDCCN tasks manage transfers of data between managed systems and SAP Solution Manager. While the decommissioning function initiates the deletion of RFC destinations, SAP recommends you control the configuration in transaction SDCCN:

Every task next to the local SAP Solution Manager system must be deleted. SDCCN tasks cannot work without managed system configuration.

Additionally, generated EWA documents and service definitions can be deleted. Check EWA documents existing in transaction SOLMAN_WORKCENTER -> Technical Monitoring -> Automated Reporting:
Existing service definitions can be checked in transaction `SOLMAN_WORKCENTER` -> `SAP Engagement and Service Delivery` -> `Services`:

To clean up service delivery content and EWA documents, use report `RDSMOPREDUCEDATA`. 
7.3.3 Application Operations

Preparation Activities

Decommissioning of managed systems apply to resets of most monitoring configurations.

See SAP Note 2260715 for the reduction of monitoring data from the source system:

- Delete outdated reporting data in BW and old InfoCubes in AoPs
- Delete old traces, shared memory snapshots, node aggregates in MAI
- Delete outdated exception data in central exception store
- Clean up unused stores and history data from CCDB tables
- Clean up change log (change history) of the LMDB

Another application area is the SMD Agent Admin Application. This application can be accessed via the URL: http://<solman-host>:<solman-port>/smd/AgentAdmin. Please check if there are any orphaned SMD agent entries. This check should proceed a decommissioning procedure.
Reconfiguration Activities

The technical monitoring requires the connection to a managed system via the managed system configuration. Part of this guided procedure is the rollout of extractors and the configuration and transfer of SMD agent settings. Execute the managed system configuration for the relevant satellite systems in transaction SOLMAN_SETUP to ensure the prerequisites of setting up the technical monitoring application.

Next, initiate monitoring configuration via transaction SOLMAN_SETUP -> Technical Monitoring

Custom templates in MAI are not affected by the system copy or upgrade. As a test system for the MAI scenarios, consider using SAP Solution Manager.

Re-run the infrastructure configuration in this guided procedure. In step 5, define a scope for connected managed systems on the target system.

7.3.4 Business Process Monitoring

For Business Process Monitoring, distinguish between MAI-based and the classic monitoring infrastructure. MAI-based Business Process Monitoring is available as of SAP Solution Manager SP12. In principle, as of SP12, both infrastructures can be used in parallel. Consider solutions for decisions regarding whether to use the MAI-based
infrastructure. Conversions of solutions are possible when converting from standard monitoring to MAI-based monitoring, only.

### 7.3.4.1 Standard Business Process Monitoring

With standard Business Process Monitoring, individual monitoring objects do not store system and client information. The monitoring objects are linked to a logical component. System and client are determined based on the leading role of the solution. Since production systems (associated with source system) have been replaced by sandbox systems (associated with target system) in logical components, the Business Process Monitoring configuration environment considers sandbox systems.

**Caution:** Please ensure that ST-PI and ST-A/PI levels and applied ST-PI and ST-A/PI correction notes match for the sandbox systems and the production systems. Also, ensure that you reload monitor definitions for the sandbox systems.

After system copy configuration stores in the runtime environment, it still reflects the situation from the source system. A handover of monitoring configuration to the runtime environment happens on the generation point in time. If a running monitoring environment is important in the target system, you generate and activate the monitoring configuration for all relevant monitoring objects.

**Note:** If the purpose of system copy target system is to test the upgrade to 7.2 and the Solution Content Activation, and as part of that, the conversion of monitoring configuration to MAI, there is no need to have activated-monitoring in place.

### 7.3.4.2 MAI-Based Business Process Monitoring

In MAI-based Business Process Monitoring, the system and client information are stored close to the objects. At creation system and client are determined from the logical component, the object is associated to, and the leading role of the solution, and stored as object attributes. An exchange of the systems of a logical component has no impact on these object attributes.

The only way to get the system and client information exchanged is to recreate them. Consider transaction `SOLUTION_TRANSFER` for this action:

1. Export the solution from the source system.
2. Create a new solution in the target system. Leading role of the new solution must be the same as in the source system.
3. Add all required logical components. It is crucial that all logical components in the target solution contain a system for the leading role of the solution. The systems in target and source solution should have the same ST-A/PI content. Monitor definitions loaded from the managed systems to the SAP Solution Manager should be up-to-date for all systems where you have configured monitoring.
4. Import the solution from the source system into the target system.

**Note:** Interface channel monitoring objects must be recreated manually, rather than with solution transfer.
Note: Monitoring objects can be transferred just once. Another transfer of the same solution, the objects that were already transferred before, will not be recreated, but reassigned to the transferred solution. To force a recreation of the objects, clear mapping table DSWP_SU_TRA_MAI before doing the transfer.

7.3.5 IT Service Management

With system copy procedure all incidents, service requests and problems are available on the copied system with the status from production environment. Since those transactions should be used for other purposes, they need to be identified and closed.

Identification can be done via WebUI – please consider all used transaction types for this scenario, including SAP standard transaction types and customer-specific copies.

With report AI_SDK_SP_AUTO_CLOSE, you can schedule the closure for multiple transactions at the same time, according to selection criteria.

![Program AISDK_SP_AUTO_CLOSE](image)

Please ensure that, in the case of automatic email notifications being configured in the transaction type customizing, e-mail sending jobs are disabled for the closure process. Furthermore, trough closure-created send requests should be deleted before enabling send mail jobs for this system again.

Further information on this report can be found in SOLAN_SETUP -> IT Service Management -> Perform Optional Configuration -> Configure Manually -> Set Up Automatic Confirmation of Message.

IBase

In preparation for usage of IT Service Management, the IBase should be checked so that there are no duplicated entries and IObjects are generated properly.
For further information, see SAP Note 2012029 (Duplicated IBases).

**E-Mail Inbound Functionality**

The copied system contains inbound mail customizing which must be changed to an address not used in productive environment (Defining E-Mail Receiving Address). This address also needs to be mapped in the mail server. Further information on configuration of e-mail inbound can be found in the corresponding wiki (https://wiki.scn.sap.com/wiki/display/SAPITSM/Email+Inbound).

**Note:** Even if the processes should stay the same, consider the following:

Transactions: Closure of existing transactions might not be enough. It might be necessary to remove or to anonymize them.

Service Products: Cleanup needed

Partner determination: Adaption needed

SLAs: Cleanup/adaption needed

Check Lists: Cleanup/adaption needed

Guided Procedures: Cleanup/adaption needed

### 7.3.6 Change Request Management

With system copy procedure all change transactions are available on the copied system with the status of production environment. Since these transactions should be used for other purposes, they need to be identified and closed.

Identification can be done via WebUI – please consider all used transaction types for this scenario such as SAP standard transaction types and customer specific copies.

Please make sure that communication (for example, via RFC) to the managed system is not possible from copied system until all managed system information are decommissioned properly. The lifecycle status of a technical system in the LMDB can be used to make this easier.

With report `CRM_SOCM_SERVICE_REPORT`, you can change numerous transactions and set them to a final status (such as Withdraw).
Consider dependencies between change transactions and change request, such as change transaction must be closed before corresponding change request can be closed.

As an alternative to working with these ChaRM projects/cycles, which should be on the copied system, use report /TMWFLOW/TL_COMPLETE_FORCE (see SAP Note 933705 and SAP Note 1345459) to complete your cycle. After using this report, you cannot work with the assigned ChaRM transaction, which is why the closure described above must be completed beforehand.

If the copied ChaRM project is decommissioned completely, refer to the corresponding section in SAP Note 933705. This procedure is only valid for non-productive SAP Solution Manager systems.

To set up a ChaRM simulation landscape again, continue with the following steps:

- Set-Up simulation client landscape
- Configure RFC destinations for client landscape
- Set-Up STMS for these client
- Prepare logical component
- Create / Maintain ChaRM project

For more information, see:
In preparation for the upcoming upgrade, create a set of projects and ChaRM transactions within these projects, so that selection with content activation can be met, and ChaRM transaction in a different status will be activated through the procedure.

7.3.7 Solution Documentation

Projects/Solutions:
This chapter describes solution documentation-related aspects of SAP Solution Manager system copy. It is limited to the most important aspects of making projects/solutions initially available in different SAP Solution Manager systems.
While all projects/solutions are available after content activation, see below for limitations.

Logical Components:
All logical components and assigned systems which are assigned to projects/solutions are available.
Please note that new logical components created for test purposes (such as ChaRM test landscape) must be assigned or replaced in existing projects/solutions.

Objects and Documents:
The following elements of projects/solutions are included:
• Project structure (such as scenarios, processes, process steps) with all assignments (transactions, configuration objects, development objects, test cases, and others)
• All documents
• Structure attributes (customer attributes need to be transferred separately)
• Assigned test cases (manual test cases and e-CATTs, CBTA), which are stored centrally in the SAP Solution Manager system
• Assigned TBOMs (as of SAP Solution Manager 7.1)
• Status values in roadmaps directly assigned to a project, and project-related documents assigned to this roadmap.
• Status values and status schema
• Customer attributes
• Organizational unit and job (end user tab)
• Change history of changes on the tabs
• Assigned service messages and issues
• Assigned end users and end user roles

Documents consist of all versions including and change versions, which are created automatically whenever a document is changed.
Please note that documents stored on a third-party supplier’s content server and not on an SAP Content Server will not be transported directly. Please pay attention to SAP Note 865561 describing a workaround for this situation.
7.3.8 Test Management

For the managed systems, which are planned to be used for testing (system under test), please ensure, that the RFC destinations are configured.

Unused test plans and packages can be removed by running the transaction STWB_2. For details, see the *Alternative Storage and Deletion Strategies* chapter in the Application Operations Guide for SAP Solution Manager 7.2.

7.3.8.1 Component Based Test Automation

In the solman_setup guided procedure’s step 9 of Component-Based Test Automation (CBTA), you can perform the CBTA self-check to verify the configuration. For further details, you can refer to the official How-to Guide for CBTA.

7.3.8.2 Business Process Change Analysis

Working RFC’s which are created as part of the managed system configuration are crucial for the BPCA scenario. Therefore, please test or re-create the RFC connections for the managed systems, which are in scope for this scenario. Furthermore, in case of managed system replacement, please keep in mind to replace/re-use the logical components and to re-schedule the UPL extractor. To ensure, that the BPCA can be used after a system copy on the target SAP Solution Manager, the BPCA Self Checks can be performed by executing the AGS_BPCA_SELF_CHECK report on SAP Solution Manager. The report is accessible via SAP Solution Manager Work Center Test Management – View Administration – TBOM Utilities.

For a complete deletion of TBOMs of a certain type from selected projects / solutions you can use the TBOM Mass Deletion Tool: Test Management Workcenter -> Administration -> TBOM Utilities -> TBOM Mass Deletion, excluding dynamic TBOMs.

7.3.9 Data Volume Management

A critical step in the configuration is to ensure that all the required RFCs are available, working, and have the correct level of authorization. This means RFCs created during managed system configuration must be reviewed and re-created, if necessary. Another important step is to enable and check the DBACockpit connection as part of the managed system configuration. This allows the system to use the preferred extractor DVM Size Statistics Extractor (DBCON). This is the only supported connection for the DVM Size Extractor from Solman 7.20 SP05 onwards. The DBCON is available from Solman 7.10 SP12. Next, follow the DVM setup guided procedure and perform the relevant steps, such as Activate BW Content or Adjust Extractor Settings. Additionally, we recommend running the cleanup report: RAGS_DVM_CLEANUP_UTILITIES to identify and to delete obsolete DVM data, such as for the decommissioned systems.
7.3.10 Custom Code Management

To be able to test the CCM scenario after a system copy, the Custom Code Management guided procedure needs to be re-executed and reviewed. This ensures that the relevant data is collected properly for the selected managed systems. After setup steps (housekeeping, scheduling extractors, collectors, and others) are executed, you can additionally run the CCM Infrastructure Check Report in order to identify any missing configuration items. For SAP Solution Manager 7.1, please refer to SAP Note 2244874. For SAP Solution Manager 7.2, please refer to SAP Note 2380152. Also, if you like to delete the data from the UPL InfoCube(s) for specific managed systems, which are not relevant anymore in the target SAP Solution Manager, please refer to the Sap Note 2314290.
8 System Copy Recommendations for Upgrading to SAP Solution Manager 7.2

General information

- When the migration to SAP HANA DB is planned, use data volume capabilities for data reduction (refer to SAP Note 2257558).
- Define a scope of sandbox systems that can be connected to the target system. In that context plan the registration and managed system configuration of the target SAP Solution Manager.
- Use the local SLD on the target system to create an isolated environment and to avoid any interaction with your productive SAP environment.
- Use a part of the managed system decommission before the upgrade to reduce data and clean up the LMDB before entering the preparation phase of the Content Activation.
- Avoid performing a fully-managed system decommission so that you can keep landscape information on the source system from being affected.
- Change the agent authentication from standard user and password to certificate authentication.

Change Request Management

As ChaRM content needs to be activated during content activation process, there should be ChaRM test data to test the content activation procedure. For example, provide a set of ChaRM projects with the different project and task list types which are in use. Create change requests and change documents according to the customized transaction types. Prepare these transactions in different status so that all steps of this transaction can be executed after upgrade and content activation.

Application Operations

- When changing the hostname or ports of the AS Java during the dual stack split, plan a further monitoring downtime for the reconnection of SMD agents.
- SAP Web Dispatcher is needed in case of a separate host for the AS Java SAP Solution Manager 7.2.