Upgrade & Update Guide Document version: 1.1 – 2016-03-22 CUSTOMER

SAP Enhancement Package 4 for SAP Supply Chain Management 7.0



Document History

🛕 Caution

Before you start the implementation, make sure you have the latest version of this document. You can find the latest version at the following location: service.sap.com/instguides / .

The following table provides an overview of the most important document changes.

Table 1

| Version Date | Description |
|----------------|---|
| 1.0 2016-01-27 | First version. |
| 1.1 2016-03-22 | Added cautions relevant for source releases 7.0 and higher when upgrading to Enhancement Package 4 of SAP SCM 7.0 in the following chapters: Planning Process Follow-Up Activities |

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Only valid for: SAP SCM |

1 Getting Started

1.1 Naming Conventions

Only valid for: SAP NetWeaver | Target Release = SAP NetWeaver 7.1; SAP NetWeaver 7.2; SAP NetWeaver 7.3; SAP NetWeaver 7.4 |

SAP NetWeaver System and SAP System

In this document, the term "SAP system" is the same as "SAP NetWeaver system". "SAP" is also used as a synonym for "SAP NetWeaver" in terms such as "SAP start profile" or "SAP system language".

End of: SAP NetWeaver | Target Release = SAP NetWeaver 7.1; SAP NetWeaver 7.2; SAP NetWeaver 7.3; SAP NetWeaver 7.4 |

Only valid for: SAP NetWeaver | Target Release = SAP NetWeaver 7.0 EHP1;SAP NetWeaver 7.0 EHP2;SAP NetWeaver 7.0 EHP3;SAP NetWeaver 7.4 | Application Server (AS) |

SAP NetWeaver Application Server System and SAP System

In this document, the term "SAP system" is the same as "SAP NetWeaver Application Server system". "SAP" is also used as a synonym for "SAP NetWeaver Application Server" in terms such as "SAP start profile" or "SAP system language".

End of: SAP NetWeaver | Target Release = SAP NetWeaver 7.0 EHP1;SAP NetWeaver 7.0 EHP2;SAP NetWeaver 7.0 EHP3;SAP NetWeaver 7.4 | Application Server (AS) |

Only valid for: SAP NetWeaver | Target Release = SAP NetWeaver 7.0 EHP1;SAP NetWeaver 7.0 EHP2;SAP NetWeaver 7.0 EHP3;SAP NetWeaver 7.4 | Business Warehouse ABAP |

SAP NetWeaver Business Warehouse System and SAP System

In this document, the term "SAP system" is the same as "SAP NetWeaver Business Warehouse system" or "SAP NetWeaver BW system". SAP is also used as a synonym for "SAP NetWeaver Business Warehouse" or "SAP NetWeaver BW" in terms such as "SAP start profile" or "SAP system language".

End of: SAP NetWeaver | Target Release = SAP NetWeaver 7.0 EHP1;SAP NetWeaver 7.0 EHP2;SAP NetWeaver 7.0 EHP3;SAP NetWeaver 7.4 | Business Warehouse ABAP |

Only valid for: SAP ERP |

SAP ECC System and SAP System

In this document, the term "SAP system" is the same as "SAP ECC system". "SAP" is also used as a synonym for "SAP ECC" in terms such as "SAP start profile" or "SAP system language".

End of: SAP ERP |

Only valid for: SAP SCM |

SAP SCM System and SAP System

In this document, the term "SAP system" is the same as "SAP SCM system". SAP is also used as a synonym for SAP SCM in terms such as "SAP start profile" or "SAP system language".

End of: SAP SCM |

SAP Solution Manager System and SAP System

In this document, the term "SAP system" is the same as "SAP Solution Manager system". SAP is also used as a synonym for SAP Solution Manager in terms such as "SAP start profile" or "SAP system language".

End of: SAP Solution Manager |

Only valid for: SAP Business ByDesign;SAP CRM;SAP ERP;SAP NetWeaver;SAP SCM;SAP SRM |

SAP System ID

Only valid for: UNIX; Windows |

In this document, the SAP system ID is abbreviated as "SAPSID" or "sapsid". If "<sapsid>" is used, your SAP system ID must be in lowercase letters, for example "prd". If "<SAPSID>" is used, you must write in uppercase letters, for example "PRD".

End of: UNIX;Windows |

Only valid for: IBM i5/OS |

In this document, the SAP system ID is abbreviated as "SID" or "sid". If "<sid>" is used, your SAP system ID must be in lowercase letters, for example "prd". If "<SID>" is used, you must write in uppercase letters, for example "PRD".

End of: IBM i5/OS |

End of: SAP Business ByDesign;SAP CRM;SAP ERP;SAP NetWeaver;SAP SCM;SAP SRM |

Only valid for: SAP CRM;SAP ERP;SAP NetWeaver;SAP SCM;SAP Solution Manager;SAP SRM |

SAP NetWeaver and SAP NetWeaver Enhancement Packages

In this document, we distinguish between Release 7.0 of SAP NetWeaver and an enhancement package release of SAP NetWeaver such as 7.0 including enhancement package 1 or 2. If Release 7.0 of SAP NetWeaver is mentioned explicitly, it does not refer to Release 7.0 including enhancement package 1 or 2 of SAP NetWeaver as well.

End of: SAP CRM;SAP ERP;SAP NetWeaver;SAP SCM;SAP Solution Manager;SAP SRM |

Only valid for: SAP ERP |

SAP R/3 Enterprise and SAP ERP Central Component

SAP ERP Central Component is the successor of SAP R/3 Enterprise. It consists of the SAP ERP Central Component Core with SAP ERP Central Component Extension Set. In this document, the following short forms are used:

- "SAP ECC" for "SAP ERP Central Component"
- "SAP ECC Core" for "SAP ERP Central Component Core"
- "SAP ECC Extension Set " for "SAP ERP Central Component Extension Set"

End of: SAP ERP |

Only valid for: SAP SCM |

SAP liveCache and SAP liveCache technology

As of SAP SCM 5.0, the "SAP liveCache" is renamed to "SAP liveCache technology". In this document, the short form "SAP liveCache" or "liveCache" is used.

End of: SAP SCM |

Only valid for: SAP CRM;SAP ERP;SAP NetWeaver;SAP SCM;SAP Solution Manager;SAP SRM | ABAP |

SAP NetWeaver Application Server, SAP Web Application Server, and SAP Basis

SAP NetWeaver 7.0 renames SAP Web Application Server as SAP NetWeaver Application Server. In releases before 6.10, the component had been called SAP Basis. In this document, the terms are used as follows:

- The term "SAP NetWeaver Application Server" (or the short form "SAP NetWeaver AS") is used when referring to Release 7.0 and higher.
- The term "SAP Web Application Server" (or the short form "SAP Web AS") is used when referring to Releases between 6.10 and 6.40.
- Only valid for: Source Release = SAP Basis 4.6C; SAP Basis 4.6D; SAP R/3 3.1I; SAP R/3 4.0B; SAP R/3 4.5B; SAP R/3 4.6B |

The term "SAP Basis" (or the short form "Basis") is used when referring to Release 4.6D and lower.

End of: Source Release = SAP Basis 4.6C;SAP Basis 4.6D;SAP R/3 3.1I;SAP R/3 4.0B;SAP R/3 4.5B;SAP R/3 4.6B

End of: SAP CRM;SAP ERP;SAP NetWeaver;SAP SCM;SAP Solution Manager;SAP SRM | ABAP |

Only valid for: ABAP+Java |

SAP NetWeaver Application Server and SAP Web Application Server

- The term "SAP NetWeaver Application Server" (or the short form "SAP NW AS") is used in this document when referring to Release 7.0 and higher.
- The term "SAP Web Application Server" (or the short form "SAP Web AS") is used in this document when referring to Release 6.40.

End of: ABAP+Java |

Only valid for: SAP NetWeaver | ABAP;ABAP+Java |

Usage of Release Names

In the general sections of the document that apply to the complete system, "release" is used to refer to the release of the underlying SAP Basis, SAP Web Application Server, or SAP NetWeaver usage type Application Server ABAP (AS ABAP).

Unless otherwise specified, the term "release" is used in the usage type-specific sections of this document to refer to the release of the SAP NetWeaver systems with usage types, or their predecessors, for example, SAP BW, SAP NetWeaver BI, or SAP XI system.

The titles of product-specific sections start with the name of the usage type, for example, "AS ABAP: Using SAP NetWeaver Application Server as SAP NetWeaver BW System".

The following table explains which release of SAP Web Application Server and SAP NetWeaver Application Server corresponds to which release of SAP BI or SAP NetWeaver BW:

| SAP Basis / SAP Web Application Server / SAP NetWeaver Application Server | SAP BI / SAP NW BW |
|--|--------------------|
| 6.40 | 3.5 |
| 7.0 | 7.0 |
| End of: SAP NetWeaver ABAP:ABAP+.Java | |

Table 2: SAP BW Releases

Only valid for: SAP SCM |

Table 2

Usage of Release Names

Unless otherwise specified, the term "release" is used in the product-specific sections of this document to refer to the release of the SAP SCM system. The titles of product-specific sections start with the name of the product, for example, "SAP SCM: Planning the Upgrade of SAP liveCache and Optimizer".

In the general sections of the document, release is used to refer to the release of SAP Web Application Server or SAP NetWeaver Application Server system.

The following table explains which release of SAP Web Application Server or SAP NetWeaver Application Server corresponds to which release of SAP SCM:

| l able 3 | |
|--|---|
| SAP Web Application Server / SAP NetWeaver Application Server | SAP SCM |
| SAP Web Application Server 6.40 | SAP SCM 4.1 |
| SAP NetWeaver Application Server 7.0 | SAP SCM 5.0, SAP SCM 5.1 |
| SAP NetWeaver Application Server 7.0 including enhancement package 1 | SAP SCM 7.0 |
| SAP NetWeaver Application Server 7.0 including enhancement package 2 | SAP SCM 7.0 including SAP enhancement package 1 |
| SAP NetWeaver Application Server 7.0 including enhancement package 3 | SAP SCM 7.0 including SAP enhancement package 2 |
| SAP NetWeaver Application Server 7.4 | SAP SCM 7.0 including SAP enhancement package 3 |
| End of: SAP SCM | 1 |

Only valid for: SAP Solution Manager |

Usage of Release Names

Unless otherwise specified, the term "release" is used in the product-specific sections of this document to refer to the release of the SAP Solution Manager system. The titles of product-specific sections start with the name of the product, for example, "SAP Solution Manager: <Title Text>".

The following table explains which release of SAP NetWeaver Application Server and SAP Web Application Server corresponds to which release of SAP Solution Manager:

| Table 4 | |
|---|--|
| SAP Web Application Server / SAP NetWeaver Application Server | SAP Solution Manager |
| SAP NetWeaver 7.0 Application Server | SAP Solution Manager 7.0 |
| SAP NetWeaver 7.0 including enhancement package 1 for SAP NetWeaver | SAP Enhancement Package 1 for SAP Solution Manager 7.0 |
| SAP NetWeaver 7.0 including enhancement package 2 for SAP NetWeaver | SAP Solution Manager 7.1 |
| End of: SAP Solution Manager | · |

Only valid for: SAP CRM:SAP ERP;SAP NetWeaver:SAP SCM;SAP Solution Manager;SAP SRM | Target Release = SAP NetWeaver 7.1;SAP NetWeaver 7.2;SAP NetWeaver 7.3;SAP NetWeaver 7.4 |

SAP System Instances

As of SAP NetWeaver 7.1, the concept and naming of SAP system instances has changed. The terms "central instance" and "dialog instance" are no longer used. Instead, the SAP system consists of the following instances:

• Application server instances

Application server instances can be installed as "primary application server instance" or "additional application server instances".

- Central services instance
- Database instance

End of: SAP CRM;SAP ERP;SAP NetWeaver;SAP SCM;SAP Solution Manager;SAP SRM | Target Release = SAP NetWeaver 7.1;SAP NetWeaver 7.2;SAP NetWeaver 7.3;SAP NetWeaver 7.4 |

Only valid for: SAP CRM;SAP ERP;SAP NetWeaver;SAP SCM;SAP Solution Manager;SAP SRM | ABAP+Java;Java |

Instance Name

In this document, <instance_name> is used as a placeholder for the instance name in the instance directory path of your system.

Only valid for: Java | Target Release = SAP NetWeaver 7.1;SAP NetWeaver 7.2;SAP NetWeaver 7.3 |

Substitute <instance_name> with J<xx> for the primary or additional application server instance, where <xx> stands for the instance number.

End of: Java | Target Release = SAP NetWeaver 7.1;SAP NetWeaver 7.2;SAP NetWeaver 7.3 |

Only valid for: ABAP+Java | Target Release = SAP NetWeaver 7.1;SAP NetWeaver 7.2 |

For dual-stack systems, substitute <instance_name> with DVEBMGS<xx> for the primary application server instance and D<xx> for additional application server instances, where <xx> stands for the instance number.

End of: ABAP+Java | Target Release = SAP NetWeaver 7.1;SAP NetWeaver 7.2 |

End of: SAP CRM;SAP ERP;SAP NetWeaver;SAP SCM;SAP Solution Manager;SAP SRM | ABAP+Java;Java |

Only valid for: IBM DB2 for i5/OS |

Archiving and Journaling

In this document, the term "archiving" is used as a synonym for "journaling database file changes".

Only valid for: Upgrade |

In this document, "archiving is deactivated" means that the journal receivers are automatically deleted by the system. Journaling is not switched off during the upgrade.

End of: Upgrade |

Only valid for: Enhancement Package Installation |

In this document, "archiving is deactivated" means that the journal receivers are automatically deleted by the system. Journaling is not switched off during the enhancement package installation.

End of: Enhancement Package Installation |

End of: IBM DB2 for i5/OS |

Only valid for: IBM DB2 for Linux and UNIX and Windows |

IBM DB2 for Linux, UNIX, and Windows and Short Forms

In this document and in the upgrade dialogs, the short forms "DB2 for Linux, UNIX, and Windows" or "DB2 LUW" are used for the database IBM DB2 for Linux, UNIX, and Windows, and, in certain cases, the SAP ID "DB6" is used

as well. In previous SAP documents, IBM DB2 for Linux, UNIX, and Windows was referred to as "IBM DB2 Universal Database for UNIX and Windows" or "DB2 Universal Database for UNIX, Windows".

End of: IBM DB2 for Linux and UNIX and Windows |

Only valid for: IBM DB2 for z/OS |

IBM DB2 for z/OS and Short Forms

In this document and in the upgrade dialogs, the short form "DB2 for z/OS" is used for the database IBM DB2 for z/OS, and in certain cases, the SAP ID "DB2" is used as well. In previous SAP documents, IBM DB2 for z/OS was referred to as "IBM DB2 Universal Database for z/OS", "IBM DB2 Universal Database for OS/390" or "IBM DB2 Universal Database for OS/390 and z/OS".

End of: IBM DB2 for z/OS |

Only valid for: IBM i5/OS |

Operating System Name

As of operating system version IBM i 5.4, the operating system has been renamed from "IBM i5/OS" to "IBM i" (short form: "i"). The names of previous operating system versions remain unchanged, they are still referred to as "IBM i5/OS V5R3" and "IBM OS/400 V5R2".

In this document, the new name "IBM i" is used in general if we do not refer to a specific operating system version. If we refer to a specific version, we use the respective operating system name.

End of: IBM i5/OS |

Only valid for: IBM DB2 for i5/OS |

Database Name

As of operating system version IBM i 5.4, the database has been renamed from "IBM DB2 for i5/OS" to "IBM DB2 for i". In previous SAP documents, "IBM DB2 for i" was referred to as "IBM DB2 for i5/OS", "IBM DB2 Universal Database for iSeries", "IBM DB2 Universal Database for AS/400" or "DB2/400".

End of: IBM DB2 for i5/OS |

1.2 Essential Information: Process and Documentation Overview

You are currently reading the *Upgrade & Update Guide - SAP Enhancement Package 4 for SAP Supply Chain Management 7.0.* This guide only contains information specific to SAP SCM, but you need additional information to enable you to perform your upgrade correctly.

This additional information, such as a description of process steps and required additional documentation is provided in the *Upgrade Master Guide for SAP enhancement package 4 for SAP SCM 7.0*. You **must** make sure that you have downloaded the latest version of this guide from the SAP Service Marketplace at

service.sap.com/instguides >> Installation & Upgrade Guides >> SAP Business Suite Applications >> SAP SCM >> SAP SCM Server >> Using SAP enhancement package 4 for SAP SCM Server 7.0].

The Upgrade Master Guide contains the section *Main Implementation Processes and Related Documentation* with the following subsections containing vital information:

• Planning for Installation, Update, and Upgrade Processes

Contains a list of topics (including documentation references) you need to consider when you are planning your implementation project.

• Implementation of the Update Process

Provides a step-by-step overview of the update process (installation of an enhancement package on an existing SAP system), with reference to the required tools and associated documentation.

1 Note

Make sure that you collect all the information provided in this overview before starting your update project.

Implementation of the Upgrade Process

Provides a step-by-step overview of the upgrade process (upgrade to an SAP system including an enhancement package), with reference to the required tools and associated documentation.

i Note

Make sure that you collect all the information provided in this overview before starting your upgrade project.

Constraints

If you want to upgrade from a non-Unicode SAP system to a Unicode SAP system, you have to perform a special procedure named *Combined Upgrade & Unicode Conversion (CU & UC)*. For more information, see SAP Note 928729 &.

1 Note

An upgrade from a Unicode to a non-Unicode SAP system is not possible.

Only valid for: SAP SCM | Enhancement Package Installation; Upgrade |

1.3 Important SAP Notes

You must request the following SAP Notes from the SAP Support Portal before you start the upgrade/update process:

- Central Software Update Manager Note (referenced in Update Guide Update of SAP Systems Using Software Update Manager)
- Application-specific upgrade/update note
- SAP Note for your database (referenced in Update Guide Update of SAP Systems Using Software Update Manager)

Since these SAP Notes are updated regularly, make sure that you always use the latest version.

| Table 5: SAP | Notes for | Preparing the SCM | I Upgrade and Update |
|--------------|-----------|-------------------|----------------------|
|--------------|-----------|-------------------|----------------------|

| Title | Comment |
|--|--|
| EHP4 for SAP SCM 7.0 SP Stacks - Release & Information Note | This Release Information Note (RIN) contains information and references to SAP Notes for applying Support Package (SP) Stacks of SAP Enhancement Package 4 for SAP SCM |
| | EHP4 for SAP SCM 7.0 SP Stacks - |

| SAP Note Number | Title | Comment |
|-----------------|--|---|
| 2261395 🏕 | Prerequisites for upgrade to SCM 7.04 (SCM 7.0 EHP4) | Contains information about prerequisites for the upgrade to SAP SCM 7.0 EHP 4 |
| 1334357 🏕 | SCM Java components handling by the upgrade program | Contains additional information about upgrading Store User Interface for SCM or SCM Web Communication Layer for SAP Event Management |
| 928729 🟕 | Combined Upgrade & Unicode Conversio | n (CU &UC) |
| 458363 👉 | Prepare in upgrade: Inconsistent InfoObjects + InfoCubes | |
| 31559 1 | NT: Setting environment variables for R/3 kernel | |

Table 6: SAP Notes for SAP liveCache

| SAP Note Number | Title | Comment |
|-----------------|--|--|
| 337445 🍲 | liveCache and memory management | Provides additional information about liveCache memory management |
| 487972 🏕 | Operating system parametrization of liveCache | Contains information about how to make optimal settings for the operating system parameter for SAP liveCache |
| 305634 | RFC destination for working globally with the liveCache | |
| 429215 | UNIX Settings for File Systems and Tracefiles > 2 GB | |
| 1037016 🖢 | IBM i: MaxDB Client Support for IBM i application server | |

Table 7: Other SCM-Specific SAP Notes

| SAP Note Number | Title | Comment |
|-----------------|---|--|
| 1539087 🚈 | Removal of ABAP program variants from TCT process chains | After the upgrade to EHP 2 for SCM 7.0 with bound SCM 702 Stack 1 the following dump occurs regularly: LOAD_PROGRAM_NOT_FOUND. This SAP Note describes how to solve this issue. |
| 1656160 🏕 | Consulting Note: Procedure for Upgrading to F& R 5.2 | Provides additional information about upgrading to F&R 5.2 |
| 1250862 🏕 | Enhancements to upgrade SCM F&R to Release 7.0 and higher | Provides additional enhancements to the upgrade of SCM Forecasting and Replenishment 5.1 to 7.0 and higher releases |
| 1019288 | SNC 5.1 Steps After Upgrade | |

| SAP Note Number | Title | Comment |
|-----------------|--|--|
| 1178483 🍲 | SNC 7.0 Order Documents: Required Customizing | Contains information about the required Customizing settings for working with order documents |
| 915367 🍲 | TDL: Automatic activation of the transaction data areas | Provides information about the settings you must make to automatically activate transaction data |
| 1269674 加 | Change of enhancement technique for E | RP-APO CIF |
| 1428977 🏕 | CIF inbound BAdI definitions for Ext. Pro | c. Relationship |
| 573512 🎓 | SNP optimizer Customizing for an upgra | ide from APO 3.x |
| 1049026 🏕 | SNP Optimizer: Upgrade to SAP SCM 5.2 | 1 |
| 1152453 🎓 | Termination generating InfoCube write p | program |
| 865333 🚈 | Upgrade assistant for macro books | Contains information about the function that makes macros from the source release work after an upgrade |
| 505304 を | Disk space for Core Interface communication | Contains information about how to make sure there is sufficient disk space for communication through the Core Interface |
| 210919 🏕 | Collective Note: Logical system names | Contains additional information about how to deal with error message B2001: Local logical system is not defined |
| 568289 🏕 | Information about report /SAPAPO/ MC01_CACL_FROM_R3 | Contains additional information about the /SAPAPO/MC01_CACL_FROM_R3 report |
| 428102 🏕 | Performance: Loading planning area version | Contains information about how to optimize system performance when loading planning area versions |
| 707828 🏕 | Switching from old to new TLB planning | Provides information about using the old and the new Transport Load Builder (TLB) in upgrade systems |
| 1152453 | Termination generating InfoCube write p | program |
| 820183 | New authorization concept in BI | |
| 977644 🚈 | SCM/APO upgrade does not transfer an | y simulation versions |
| 1827752 🏕 | Planning Object Structure Persistence Changes on SAP HANA | Contains information about migrating planning object structures from InfoCubes to DataStore objects. |

| SAP Note Number | Title | Comment |
|-----------------|--|---|
| 1818080 🏕 | Planning object structure migration report: DSO persistence | Contains information about the report you must use to migrate planning object structures from InfoCubes to DataStore objects. |
| 1864111 | Planning object structure migration report: corrections | Contains enhancements for the report you must use for migrating planning object structures from InfoCubes to DataStore objects. |
| 1821768 🏕 | New APO BI content InfoObject for SAP SCM on SAP HANA | Contains information about a supported way of storing planning object GUIDs in DataStore objects. |
| 1871831 | Installation of SCM 7.0 on HANA with integrated liveCache | Contains supplementary information to the Installation Guide |
| 1825703 🏕 | Migration SCM on SAP HANA with integrated SAP HANA liveCache | Contains information about how to migrate an existing SCM on SAP HANA system with an external liveCache to an SCM on SAP HANA system with an integrated liveCache |
| 886103 🏕 | System Landscape Copy for SAP SCM | Contains supplementary information about the system landscape copy |
| 1934307 🏕 | Migration of SCM from AnyDB to SAP HANA | Contains supplementary information about heterogeneous database migration |
| 1825703 🏕 | Migration SCM on SAP HANA with integrated SAP HANA liveCache | Contains information about how to migrate an existing SCM on SAP HANA system with an external liveCache to ar SCM on SAP HANA system with an integrated liveCache |
| 886103 🏕 | System Landscape Copy for SAP SCM | Contains supplementary information about the system landscape copy |
| 1934307 🍫 | Migration of SCM from AnyDB to SAP HANA | Contains supplementary information about heterogeneous database |

2 Using SAP HANA

SAP is enabling the existing functions of SAP enhancement package 4 for SAP SCM 7.0 for SAP HANA to utilize the in-memory technology and enable better performing business applications. Thereby, business applications can manage large data volumes faster. SAP HANA comprises the required hardware as well as the SAP HANA appliance software (SAP HANA database and data replications tools, for example). This section provides an overview on SAP-HANA-specific information.

2.1 SAP NetWeaver Business Warehouse Settings for Migrating SAP SCM to a SAP HANA Database

Procedure

Migration of SAP SCM to SAP HANA

To set up SAP NetWeaver Business Warehouse (SAP BW) when migrating the SAP SCM system to a SAP HANA database, proceed as follows:

- 1. Activate the myself source system in SAP BW (BW client) in transaction RSA1, under Modeling Source Systems BW Activate .
- 2. Install the latest version of the following BI Content InfoObjects in transaction RSOR:
 - 0LANGU
 - O OHIENM
- 3. Run the report RS_BW_POST_MIGRATION
- 4. Run the report RSDU_TABLE_CONSISTENCY in background processing mode. For more information about executing the report, see SAP Note 1695778 2. During the first run, the report creates an analysis. If it finds errors, you must run the report a second time using the *Repair* option, also in background processing mode.

1 Note

Depending on the number of tables to be repaired, the report can take several hours to run.

Heterogeneous/Homogeneous System Copy

Proceed as follows:

- 1. Perform the following immediately after the migration and before post-migration activities:
 - 1. Information related to SAP BW post migration activities (compulsory)

Do not start SAP BW before implementing these steps.

Caution

Implement SAP Note 1695112 Area. This SAP Note contains the document *First guidance... BW on HANA* (ORANGE) Fresh Installation/Import - including unified Installer which describes the steps you must carry out in detail.

2. Information related to SAP HANA for support packages before SP05 (optional)

If the symptom Column store error: fail to create scenario: [34053] Could not create repository entry for scenario occurs, proceed as follows:

1. As the SYSTEM user in SAP HANA studio, execute the following commands:

```
Syntax

DROP PROCEDURE _SYS_REPO.GRANT_APPLICATION_PRIVILEGE;

DROP PROCEDURE _SYS_REPO.REVOKE_APPLICATION_PRIVILEGE;

DROP PUBLIC SYNONYM GRANT_APPLICATION_PRIVILEGE;

DROP PUBLIC SYNONYM REVOKE_APPLICATION_PRIVILEGE;

UPDATE _SYS_REPO.SCHEMAVERSION SET IS_CONSISTENT = 1 WHERE SCHEMA_TYPE =

'repo';
```

- 2. Restart the database.
- 3. After you do this, run the following code:

```
Syntax
SELECT * from "_SYS_REPO"."SCHEMAVERSION" where "SCHEMA_TYPE" = 'repo';
```

Check if the IS_CONSISTENT field has a value of 1. If it does, then the migration has succeeded.

- 3. Information related to transport tools
 - Implement SAP Note 1754677 👉.
- 4. Information related to SAP BW usage by SAP APO (mandatory)

If the symptoms *Error: table config for index is not valid*, *No values found for planning version*, and *Runtime Error: DYNPRO_MSG_IN_HELP* for value helps of 9A* InfoObjects occur, implement the following SAP Notes:

- ° SAP Note 1785008 🍫
- ° SAP Note 1769895 👉

If the symptom *Error repairing P-index* occurs, implement the following SAP Notes:

- ° SAP Note 1791482 🚈
- ° SAP Note 1771711 🍫
- 2. Check the logical system name of the myself source system, and make sure that it points to the SAP BW client in the SAP HANA system.
- 3. Activate the myself source system in transaction RSA1 or using the report RSTCT_INST_BIAC.
- 4. Check the technical BI Content status in transaction RSTCO_ADMIN and activate the BI content if status is not yet active.
- 5. Run the latest version of report RS_BW_POST_MIGRATION. If necessary, update the report by downloading the latest version of SAP Note 1657995 .
- 6. To check the correctness of tables in row/column store, run the report RSDU_TABLE_CONSISTENCY in background processing mode. For more information about executing the report, see SAP Note 1695778 />>). During the first run, the report creates an analysis. If it finds errors, you must run the report a second time using the *Repair* option, also in background processing mode.

1 Note

Depending on the number of tables to be repaired, the report can take several hours to run.

- 7. Run the *Consistency Check of Time Series Network* (/SAPAPO/TSCONS) transaction for all planning areas. Select the following checkboxes in the transaction:
 - Repair
 - Check liveCache Anchor
 - Check SNP Master Data

Only valid for: Enhancement Package Installation; Upgrade |

2.2 Migration of Planning Object Structures to DataStore Object Persistence

When you update or upgrade your SCM system to SAP enhancement package 4 for SAP Supply Chain Management (SAP SCM) 7.0, you must migrate the existing planning object structures (POSs) from InfoCube persistence to DataStore object persistence. This must be done directly after the upgrade or update of the SCM system, **before** you start using functions in SCM that require the use of planning object structures in Demand Planning, Supply Network Planning, Service Parts Planning, and Supply Network Collaboration.

The new persistence of planning object structures is available as of the following Support Packages:

- SAP enhancement package 3 for SAP Supply Chain Management 7.0, Support Package 01
- SAP enhancement package 2 for SAP Supply Chain Management 7.0, Support Package 07
- SAP enhancement package 2 for SAP Supply Chain Management 7.0, version for SAP HANA, Support Package 02

i Note

You must install the relevant Support Package to get the code changes that enable the migration of POSs to DataStore object persistence.

After you have installed the relevant Support Package, to perform the migration, you must run the report *Migrate Planning Object Structures to DataStore Object Persistence* (/SCMB/PSTRU_MIGRATION_TO_DSO).

For more information about the report, and details about the persistence change, see the following SAP Notes:

| Table 8 | | |
|-----------------|--|--|
| SAP Note Number | Title | Description |
| 1827752 🏕 | Planning Object Structure Persistency Changes on HANA | Consulting note that describes the motivation behind the change in persistency of planning object structures (POSs) in the SCM on SAP HANA scenario. |
| | | Recommendation We recommend that you read this SAP Note first. |

| SAP Note Number | Title | Description |
|-----------------|---|---|
| 1818080 🞓 | Planning Object Structure migration report: DSO persistence | This note describes how the report <i>Migrate Planning Object Structures to</i> <i>DataStore Object Persistence</i> (/SCMB/ PSTRU_MIGRATION_TO_DSO) works and the steps required to run it. |
| 1864111 | Planning object structure migration report: corrections | Contains enhancements and correction to the report <i>Migrate Planning Object</i> <i>Structures to DataStore Object</i> <i>Persistence</i> (/SCMB/ PSTRU_MIGRATION_TO_DSO). |

End of: Enhancement Package Installation;Upgrade |

2.3 Upgrade to SAP SCM 7.0 EHP 4 With SAP HANA Database and HANA-Integrated liveCache

This section describes how to upgrade an SAP SCM system to SAP enhancement package 4 for SAP SCM 7.0 (SCM 714) with SAP HANA as database including a HANA-integrated liveCache.

Procedure

The procedure depends on the release and configuration of the source system.

Source: SCM 713 with a database other than SAP HANA and external liveCache based on MaxDB technology

Your source SAP SCM system is already on SCM 714 (SAP enhancement package 4 for SAP SCM 7.0) and you are using a database that is not SAP HANA. The SAP SCM system includes an external liveCache based on MaxDB technology. Proceed as follows:

- 1. Perform a heterogeneous database migration from your database to SAP HANA as described in SAP Note 1934307 & (*Migration of SCM from AnyDB to SAP HANA*). This migration includes the migration of the external liveCache to the HANA-integrated liveCache.
- Migrate your SAP SCM system to SAP HANA, including Unicode conversion, if necessary.
 While migrating SAP SCM using Software Provisioning Manager (SWPM), select the Use HANA integrated liveCache checkbox in the Define Parameters SAP HANA liveCache step (step 2).

i Note

It is not supported to fall back to the MaxDB-based SAP liveCache once you start using a HANA-integrated liveCache. For information about errors that can occur in the migration process, see SAP Note 1871831 (Installation of SCM 7.0 on HANA with integrated liveCache).

Source: SCM 712 with SAP HANA and HANA-integrated liveCache

Your source SAP SCM system is on SCM 712 (SAP enhancement package 2 for SAP SCM 7.0, version for SAP HANA). Consequently, the underlying database is SAP HANA and the liveCache is integrated in SAP HANA. In this

scenario, perform a normal upgrade of your SCM system as described in this documentation. There is no need to download and upload liveCache data.

Source: SCM 700, 701, 702, or 703 with a database other than SAP HANA and external liveCache based on MaxDB technology

Your source SAP SCM system is on one of the following SCM releases:

- SCM 703 (SAP enhancement package 3 for SAP SCM 7.0)
- SCM 702 (SAP enhancement package 2 for SAP SCM 7.0)
- SCM 701 (SAP enhancement package 1 for SAP SCM 7.0)
- SCM 700 (SAP SCM 7.0)

The database is not SAP HANA and you use an external MaxDB-based SAP liveCache. Proceed as follows:

Perform an SCM upgrade to SCM 714 (as described in this document). Take SAP Note 1567308 (Requirements for the upgrade to SCM 7.02 (SCM 7.0 EHP2) into account.

The result is a system on SCM 714 with a database that is not SAP HANA and with an external MaxDB-based SAP liveCache.

2. Perform a heterogeneous database migration as described in section *Source:* SCM 713 with a database other than SAP HANA and external liveCache based on MaxDB technology above.

Source system: SCM lower than 700 with a database other than SAP HANA and external liveCache based on MaxDB technology

Your source SAP SCM system is on a release lower than SCM 7.0. In this case, perform an upgrade to SAP SCM 7.0 and follow the section Source: SCM 700, 701, or 702, with a database other than SAP HANA and external liveCache based on MaxDB technology above.

3 Planning

Only valid for: SAP SCM | Enhancement Package Installation; Upgrade |

3.1 Supported Source Releases

This section provides an overview of the supported upgrade and update paths for SAP Supply Chain Management (SAP SCM) to SAP enhancement package 4 for SAP SCM 7.0 (SAP EHP4 for SAP SCM 7.0). For release date information, see SAP Note 2234177 .

🛕 Caution

If your source release is SCM 7.0 or higher, *Stopping the CIF Queues* is the only relevant section for you in the *Planning* chapter. The upgrade of the liveCache data to SCM 7.04 occurs as an inplace upgrade (that is, within the liveCache itself). For more information about inplace upgrade, see the SAP liveCache upgrade guides at *Upgrade - SAP liveCache Technology on <OS> - SCM <Release>*. You can find the document on SAP Service Marketplace at service.sap.com/instguides > SAP Business Suite Applications > SAP SCM > SAP SCM Server > Using SAP enhancement package 4 for SAP SCM Server 7.0 > Upgrade Guides].

Only valid for: Enhancement Package Installation |

Before the update, your SAP system must have one of the source releases that have been released for this update and apply to all databases.

End of: Enhancement Package Installation |

Only valid for: Upgrade |

Before the upgrade, your SAP system must have one of the source releases that have been released for this upgrade and apply to all databases.

End of: Upgrade |

Caution

Only valid for: Upgrade |

If you have to apply Support Packages to your source release shortly before the upgrade, check whether the equivalent Support Package for the target release is already available. Otherwise, this may delay your upgrade schedule.

End of: Upgrade |

Only valid for: Enhancement Package Installation |

If you have to apply Support Packages to your source release shortly before the update, check whether the equivalent Support Package for the target release is already available. Otherwise, this may delay your update schedule.

End of: Enhancement Package Installation |

| Table 9 Source Release | Support Package Level |
|---------------------------|---|
| | |
| SCM 5.0 | SAP SCM 5.0 SP 8 |
| | SAP SCM BASIS 5.0 SP 8 |
| | SAP BASIS 7.00 SP 11 (16 for MSSQL 2008) |
| | SAP ABA 7.00 SP 11 (16 for MSSQL 2008) |
| | SAP BW 7.00 SP 12 (16 for MSSQL 2008) |
| | BI_CONT 7.03 SP 4 |
| | PI_BASIS 2005_1_700 SP 11 |
| | LCAPPS 2005_700 SP 4 |
| | SAP_AP 7.00 SP 8 |
| | QIE 200 SP 4 |
| | ST-PI 2005_1_700 SP 2 |
| | EA-IPPE 400 SP 7 |
| | SAP liveCache: LC7.6.01.09 (SAP LC/LCAPPS 5.0 SP09) |
| SCM 5.1 | SAP SCM 5.1 SP 1 |
| | SAP SCM BASIS 5.1 SP 3 |
| | SAP BASIS 7.00 SP 12 |
| | SAP ABA 7.00 SP 12 |
| | SAP BW 7.00 SP 13 |
| | BI_CONT 7.03 SP 6 |
| | PI_BASIS 2006_1_700 SP 1 |
| | LCAPPS 2006_700 SP 1 |
| | SAP_AP 7.00 SP 9 |
| | QIE 200 SP 4 |
| | ST-PI 2005_1_700 SP 6 |
| | EA-IPPE 400 SP 8 |
| | SCMSNC 5.1 SP 1 |
| | SCEMSRV 5.1 SP 2 |
| | SCMBPLUS 5.1 SP 1 |
| | SCM EWM 5.1 SP 1 |
| | SAP liveCache 7.7.02 (SAP LC/LCAPPS 5.1 SP7) |
| SCM 7.0 | SAP SCM 7.0 SP 2 |
| | SAP SCM BASIS 7.0 SP 2 |
| | SAP BASIS 7.01 SP 3 |
| | SAP ABA 7.01 SP 3 |
| | SAP BW 7.01 SP 3 |
| | BI_CONT 7.04 SP 2 |
| | PI_BASIS 701 SP 3 |
| | |
| | LCAPPS 2006_700 SP 1 |

| Source Release | Support Package Level |
|---|--------------------------------|
| | SAP_AP 7.00 SP 14 |
| | QIE 200 SP 6 |
| | |
| | ST-PI 2008_1_700 SP 0 |
| | EA-IPPE 400 SP 13 |
| | SCMSNC 7.0 SP 2 |
| | SCEMSRV 7.0 SP 2 |
| | SCMBPLUS 7.0 SP 2 |
| | SCMEWM 7.0 SP 2 |
| | SAP_BS_FND 701 SP 2 |
| | SAP liveCache 7.7.04 29 |
| SCM 7.0 including enhancement package 1 | SAP SCM 7.01 SP 3 |
| | SAP SCM BASIS 7.01 SP 3 |
| | SAP BASIS 7.02 SP 6 |
| | SAP ABA 7.02 SP 6 |
| | SAP BW 7.02 SP 6 |
| | BI_CONT 7.05 SP 2 |
| | PI_BASIS 7.02 SP 6 |
| | SAP_AP 7.00 SP 22 |
| | QIE 200 SP 6 |
| | ST-PI 2008_1_700 SP 0 |
| | EA-IPPE 400 SP 18 |
| | SCMSNC 7.01 SP 3 |
| | SCMSRV 7.01 SP 3 |
| | SCMBPLUS 7.01 SP 3 |
| | SCMEWM 7.01 SP 3 |
| | SAP_BS_FND 702 SP 4 |
| | SAP liveCache 7.7 SP7 Build 10 |
| SCM 7.0 including enhancement package 2 | SAP SCM 7.02 SP 4 |
| | SAP SCM BASIS 7.02 SP 4 |
| | SAP BASIS 731 SP 4 |
| | SAP ABA 731 SP 4 |
| | SAP BW 731 SP 4 |
| | BI_CONT 746 SP 2 |
| | PI_BASIS 731 SP 4 |
| | SAP_AP 7.00 SP 27 |
| | QIE 200 SP 6 |
| | ST-PI 2008_1_700 SP 6 |
| | EA-IPPE 400 SP 21 |
| | SCMSNC 7.02 SP 4 |
| | |

| Source Release | Support Package Level |
|---|-------------------------|
| | SCMSRV 7.021 SP 8 |
| | SCMBPLUS 7.02 SP 4 |
| | SCMEWM 7.02 SP 4 |
| | SAP_BS_FND 731 SP 4 |
| | SAP liveCache 7.9.08.05 |
| SCM 7.0 including enhancement package 3 | SCM APO 7.13 SP 0 |
| | SCM 713 SP 0 |
| | SAP SCM BASIS 7.13 SP 0 |
| | SAP BASIS 740 SP 2 |
| | SAP ABA 740 SP 2 |
| | SAP BW 740 SP 2 |
| | BI_CONT 746 SP 4 |
| | PI_BASIS 740 SP 2 |
| | SAP_AP 7.00 SP 29 |
| | QIE 200 SP 6 |
| | ST-PI 2008_1_700 SP 7 |
| | EA-IPPE 400 SP 23 |
| | SCMSNC 7.12 SP 1 |
| | SCMSRV 7.12 SP 9 |
| | SCMBPLUS 7.13 SP 0 |
| | SCMEWM 7.12 SP 1 |
| | SAP_BS_FND 747 SP 0 |
| | SAP liveCache 7.9.08.12 |

End of: SAP SCM | Enhancement Package Installation;Upgrade |

Only valid for: SAP SCM | Enhancement Package Installation;Upgrade |

3.2 Stopping the CIF Queues

Before performing a database backup, you have to stop the CIF queues in your SAP SCM system to ensure a consistent recovery state. To stop the queues, use the following reports in the SAP SCM system and all ERP systems (SAP R/3 or higher) connected, according to the queue type you are using:

• For outbound queues, use report RSTRFCQ1

Enter the following values:

- Parameter QNAME: CF*
- O Parameter Dest: <Name of Logical System of receiving system>
- Parameter FORCE: <no entry required>
- For inbound queues, use report RSTRFCI.
 - Enter the following values:

- Parameter QNAME: CF*
- Parameter FORCE: <no entry required>

To determine whether you are using inbound or outbound queues, call transaction CFC1 in the connected ERP systems and transaction /SAPAPO/C2 in the SAP SCM system.

If you are using outbound queues, you only need to stop the outbound queues. If you are using inbound queues, you have to stop both the inbound and outbound queues.

If your SAP SCM system is connected to other systems than ERP systems, for example, an SAP CRM or legacy system, make sure that these connections are stopped as well.

For more information, see SAP Note 505304 Az.

End of: SAP SCM | Enhancement Package Installation;Upgrade |

Only valid for: SAP SCM | Source Release = SAP SCM 4.0; SAP SCM 4.1; SAP SCM 5.0; SAP SCM 5.1 | Enhancement Package Installation; Upgrade |

3.3 Planning the Upgrade of SAP liveCache and Optimizer

SAP liveCache

1 Note

This section is only relevant for the upgrade to SAP SCM 7.0. It is not relevant for the installation of an SAP enhancement package for SAP SCM 7.0 (update).

To upgrade SAP liveCache, you have to perform a number of activities before, during, and after the upgrade of the SAP system. For example, you can upgrade SAP liveCache only after the SAP liveCache transactional data has been saved. Therefore, one of the main activities is to download the transactional data before the SAP liveCache upgrade, and upload the data before production operation resumes.

Report /SAPAPO/OM_LC_UPGRADE_70 lists all actions necessary to perform the upgrade. The activities are grouped in sections according to when they have to be performed:

- Section A: Maximum Two Weeks Prior to Upgrade
- Section B: Immediately Prior to Downtime
- Section C: At End of Upgrade
- Section D: At Least Four Weeks After Upgrade

Since most of the activities require user action, the report is not executed automatically. During the upgrade, the Software Update Manager stops and prompts you to execute the report whenever necessary.

If the activities cannot be performed at a given point in time, the pushbuttons are grayed out and become inactive. Next to the pushbutton for the activity, you can find the following information:

Related documentation

Using the information button you can get detailed information about how to proceed.

🛕 Caution

24

Read the documentation carefully. Some of the steps need certain input data or detailed preparations. For example, before deleting planning versions, you have to discuss with the application specialists which of the planning versions are no longer needed.

• Activity is mandatory/optional

Activities can be mandatory, recommended, or optional.

Status information

Most activities have a traffic light indicating their status.

🛕 Caution

Not all traffic lights have to be green to successfully upgrade SAP liveCache. If you do not perform an optional activity, it may have a yellow light. Traffic lights which had to be green before the upgrade may be red after the upgrade, for example, the traffic light for activating the logging.

Depending on the action you are performing, traffic lights in other sections may change to properly reflect the current status of the system.

Recommendation

To improve performance and to be able to work in parallel, it is useful to reserve some dialog processes for the preparation of SAP liveCache upgrade.

SCM Optimizer

You also begin upgrading the SCM Optimizer after the REQ_LCUPG phase has been completed. This phase must end before production startup. For more information about the procedure, see Phase REQ_LCUPG: Upgrading SAP liveCache and Performing Additional Activities [page 36].

End of: SAP SCM | Source Release = SAP SCM 4.0;SAP SCM 4.1;SAP SCM 5.0;SAP SCM 5.1 | Enhancement Package Installation;Upgrade | Only valid for: SAP SCM | Source Release = SAP SCM 4.0;SAP SCM 4.1;SAP SCM 5.0;SAP SCM 5.1 | Upgrade |

3.4 Planning the Adjustment of the BW Authorizations

As of SAP SCM 5.0, there have been changes in the BW authorization concept. Since the upgrade does not change your current settings automatically, it may be necessary to adjust your authorizations to the new concept.

Caution

This may affect you even if you have not used the BW authorization concept. For more information, see SAP Notes 1152453 & and 820183 &.

The BW authorization concept is mainly used in the Demand Planning area. However, you have to change some of the characteristics or maintained authorizations so that your authorizations work as usual after the upgrade. The following situations can occur:

• You are not using the BW authorization concept in Demand Planning.

In this case, you should decide if you either grant your Demand Planning users full access to all planning object structures (as in previous releases) including all InfoProviders, or set up restricted access to planning object structures by setting up the new NetWeaver BW Analysis Authorizations.

• You are using the BW authorization concept for Demand Planning.

In this case, you have to adjust some special characteristics and migrate your old authorizations after the upgrade.

For more information about the activities after the upgrade, see Adjusting the BW Authorizations [page 43]. For more information about using the BW authorization concept, see the SAP Library for SAP Supply Chain Management on SAP Help Portal at help.sap.com/scm704 , under SAP Supply Chain Management (SAP SCM) > SAP Advanced Planning and Optimization (SAP APO) > Application Help > Demand Planning > Technical Aspects of Demand Planning > Authorization in Supply Network and Demand Planning > Using the Bl Authorization Concept in Demand Planning].

Recommendation

If you are using the BW authorization concept, be sure to familiarize yourself with the changes in the concept in time.

BI analysis authorizations that have not been properly maintained or migrated cause access problems to planing object structures and the InfoProvider.

For more information, see SAP Help Portal at help.sap.com/nw703 , under Application Help Function-Oriented View Information Integration by Key Capability Business Intelligence Data Warehousing Data Warehouse Management Authorizations Analysis Authorizations .

End of: SAP SCM | Source Release = SAP SCM 4.0; SAP SCM 4.1; SAP SCM 5.0; SAP SCM 5.1 | Upgrade |

4 **Preparation**

4.1 Free Space Requirements

Make sure that at least the following free space is available in the system that you want to update or upgrade: Table 10

| System | Minimum Available Free Space |
|--|--|
| SUM Directory | Approximately 20 GB |
| Download Directory (temporary space requirement) | Approximately 10 GB |
| DIR_TRANS | Approximately 10 GB |
| Shadow System | Approximately the space required for your source release instance, that is, the size of the following directory: UNIX: usr/sap/<sapsid></sapsid> Windows: <drive>:\usr\sap\<sapsid></sapsid></drive> IBM i: usr/sap/<sid></sid> |
| Free space in the database | Approximately 50 GB |

Only valid for: SAP SCM | Enhancement Package Installation; Upgrade |

4.2 Meeting the Requirements for SAP liveCache

Procedure

Version and Restrictions in General

You require at least SAP liveCache server version 7.7.8-29 and SAP LC/LCAPPS 10.0 build 24 in the target release, we recommend that you always use the most current available liveCache/LCA build package of the relevant SCM release.

Before you start the upgrade program, make sure that the SAP liveCache Client has at least the following versions:

- 7.5.00.18 for SAP liveCache 7.5
- 7.6.00.22 for SAP liveCache 7.6
- 7.7.02 for SAP liveCache 7.7
- SAP LC/LCAPPS 10.0 SP13 for SAP liveCache 7.9

If you need to update the SAP liveCache or LCA-build, proceed as described in the SAP liveCache upgrade document *Upgrade - SAP liveCache Technology on <OS> - SCM <Release>*. You can find the document on SAP Service Marketplace at service.sap.com/instguides > SAP Business Suite Applications > SAP SCM > SAP SCM Server > Using SAP enhancement package 4 for SAP SCM Server 7.0 > Upgrade Guides .

Version and Restrictions on Windows 32-BIT and Tru64

If you are using SAP liveCache on Windows 32-BIT or Tru64, which are no longer supported as of SAP liveCache 7.5, you have to install SAP liveCache 7.9 on a supported operating system before the upgrade.

You can find a list of all supported SAP liveCache 7.9 platforms in the Product Availability Matrix (PAM) on SAP Service Marketplace at support.sap.com/pam > SAP Application Components > SAP SCM > SAP SCM 7.0 > Operating Systems > SCM LC or in the corresponding SAP liveCache upgrade guide.

To install SAP liveCache 7.9, proceed as described in the document *Installation – SAP liveCache Technology on* <*OS> - SCM <Release>*.

You can find the installation guide for SAP liveCache 7.9 on SAP Service Marketplace at service.sap.com/ instguides > SAP Business Suite Applications > SAP SCM > SAP SCM Server > Using SAP enhancement package 4 for SAP SCM Server 7.0 > Installation Guides .

The downloaded transaction data is loaded to the newly installed SAP liveCache during the upgrade.

Enhance System Variable for User <SID>ADM

As of SAP SCM 5.0, disp+work uses the new shared library libSQLDBC77 of the SAP liveCache 7.9 client installation to connect to the SAP liveCache. To avoid problems when connecting, you need to enhance one of the system variables in the environment of user <sapsid>adm.

Proceed as follows:

1. To find out the independent program path (<INDEP_PROG_PATH>), enter the following command as user <sapsid>adm:

dbmcli dbm_getpath IndepProgPath

Depending on your operating system and processor, the path is either <INDEP_PROG_PATH>/lib or <INDEP_PROG_PATH>/lib/lib64.

2. In the environment of user <sapsid>adm, enhance the following system variable with the path to the shared library libSQLDBC77 from step 1:

| Only valid for: AIX | |
|--|--|
| LIBPATH | |
| End of: AIX | |
| Only valid for: HP-UX | |
| SHLIB_PATH | |
| End of: HP-UX | |
| Only valid for: HP Tru64 UNIX;Solaris;Linux | |
| LD_LIBRARY_PATH | |
| End of: HP Tru64 UNIX;Solaris;Linux | |
| of: UNIX AIX;HP Tru64 UNIX;Solaris;HP-UX;Linux | |
| l of: SAP SCM Enhancement Package Installation;Upgrade | |

Only valid for: SAP SCM | Upgrade |

4.3 Making Preparations for SAP BW-Specific Objects

Before the preparation roadmap step, you have to prepare SAP BW-specific objects for the upgrade, as follows:

• Check the number ranges.

• Check the InfoObjects and repair them, if necessary.

Procedure

Checking the Logical System

To prevent errors in the XPRAS phase, you must have a logical system name defined for your production client. Proceed as follows:

- 1. Log on to the SAP system.
- 2. Call transaction SCC4 (*client maintenance*).
- 3. Select your production client.
- 4. Display the details.
- 5. Check that a logical system name is defined.

If a logical system is not defined, create and assign one before starting the upgrade.

For information about problems with logical system names, see SAP Note 210919 Az.

Checking and Repairing InfoObjects

For more information about repairing inconsistent InfoObjects, see SAP Note 458363 🍫

```
End of: SAP SCM | Upgrade |
```

Only valid for: SAP SCM | Enhancement Package Installation;Upgrade |

4.4 Adopting the Simulation Versions

The upgrade does not keep simulation versions. If you do not want to lose the changes stored in certain simulation versions, you must adopt them into the corresponding planning version before the upgrade.

Procedure

For more information and recommendations about how to proceed with simulation versions, see SAP Note 977644 .

End of: SAP SCM | Enhancement Package Installation;Upgrade |

Only valid for: SAP SCM | Enhancement Package Installation;Upgrade |

4.5 Preparing the Upgrade and Update for SAP Forecasting & Replenishment

We recommend that you make a backup of the data storage folder of SAP Forecasting & Replenishment (F&R) before the upgrade or update. You then have to save it to the new folders after the upgrade, and run a report to convert the data.

Procedure

Back up all FRP data separated by FRP server and FRP server group. End of: SAP SCM | Enhancement Package Installation;Upgrade |

Only valid for: SAP SCM | Enhancement Package Installation; Upgrade |

4.6 Specifying the SAP liveCache Execution Mode

If you have chosen the *manual selection* preconfiguration mode in phase <code>PREP_CONFIGURATION/INITSUBST</code>, a dialog box appears in which you have to specify the liveCache execution mode.

Procedure

Specify the SAP liveCache execution mode when prompted by the Software Update Manager as follows:

- If you want to enter the required data manually, select the *Prompt manually* execution mode and then choose *Continue*.
- If you want to run section B and section C of report /SAPAPO/OM_LC_UPGRADE_70 automatically, select the *Automatically run* execution mode and then choose *Continue*.

End of: SAP SCM | Enhancement Package Installation;Upgrade |

Only valid for: Upgrade |



Only valid for: SAP SCM | Upgrade |

5.1 Note About the Process

1 Note

The process is described in the tool guides. For information about where to find the tool guides, see Essential Information: Process and Documentation Overview [page 10].

🛕 Caution

If your source release is SCM 7.0 or higher, sections on *Running Report /SAPAPO/OM_LC_UPGRADE_70* are not relevant for you in the *Process* chapter. For more information, see the SAP liveCache upgrade guides at *Upgrade - SAP liveCache Technology on <OS> - SCM <Release>*. You can find the document on SAP Service Marketplace at service.sap.com/instguides > SAP Business Suite Applications > SAP SCM > SAP SCM Server > Using SAP enhancement package 4 for SAP SCM Server 7.0 > Upgrade Guides].

End of: SAP SCM | Upgrade |

Only valid for: SAP SCM | Source Release = SAP SCM 4.0; SAP SCM 4.1; SAP SCM 5.0; SAP SCM 5.1 | Upgrade |

5.2 Running Report /SAPAPO/OM_LC_UPGRADE_70 – Section A

During the upgrade to SAP SCM 7.0 using the Software Update Manager (SUM), before executing the liveCache upgrade, the SUM requests you to run the report /SAPAPO/OM_LC_UPGRADE_70.

Caution

Only confirm the execution of the report and continue the upgrade after you have run the report.

1 Note

Prior to the upgrade to SAP SCM 7.0, you must have performed at least all mandatory activities of section A (see SAP SCM: Planning the Upgrade of SAP liveCache and Optimizer [page 24]).

The documentation of the report lists all preparations that are necessary to upgrade SAP liveCache. The following activities are mandatory or recommended:

Table 11

| Activity | Mandatory/Recommended |
|---|---|
| Delete Download Table and Logs | Mandatory |
| Delete Superfluous Planning Versions | Recommended |
| Perform Consistency Check | Mandatory |
| Perform Consistency Check for APS Data | Mandatory |
| Perform liveCache/LCA Build Checks | Mandatory |
| Perform Consistency Checks DP/SNP Time Series | Mandatory (the time that elapses between this check and |
| Consistency Check DP/SNP Time Series (LC vs. APO- DB) | section B of the report must be as short as possible) |
| 2. Consistency Check SNP Time Series | |
| Consistency Check DP/SNP Time Series Networks (APO-DB vs. LC) | |
| 4. Consistency Check DP/SNP Time Series (LC only) | |
| Perform Consistency Check for Time Streams | Mandatory |

Procedure

Report /SAPAPO/OM_LC_UPGRADE_70

- 1. In the SAP system, call transaction SE38.
- 2. Run report / SAPAPO/OM_LC_UPGRADE_70.
- 3. Perform all mandatory activities in section A (see below).
- 4. Check whether you can benefit from any of the recommended activities in this section and if the answer is yes, perform them.

A1 Delete Download Table and Logs

This activity is mandatory.

Logs or data from previous upgrades that still exist n the download table can cause problems. Therefore, you must delete this data.

A2 Delete Superfluous Planning Versions

This activity is recommended.

🛕 Caution

You must perform this step in agreement with the application specialists.

To minimize the upgrade time, make sure that only essential data is transferred. You must therefore delete any unrequired planning versions.

A3 Perform Consistency Check

This activity is mandatory.

Uploading inconsistent transactional data from the database following an upgrade can lead to various problems. You should therefore conduct a consistency check with transaction /SAPAPO/OM17, which is called once you choose the button for this step. Fill in the required fields and start the report. The report compares the SAP liveCache data to the data in the database. If necessary, correct the inconsistent data.

You must perform the consistency check immediately before the upgrade in every SAP liveCache-relevant client for every planning version, as the closer you run this check to the time of the upgrade, the more up-to-date the results become.

A4 Perform Consistency Checks for APS Data

This activity is mandatory.

You can use the program /SAPAPO/OM_CHECK_LIVECACHEDATA to check whether you have faulty data in your system.

You must delete any faulty orders and if required, use the connected system to import them again after the upgrade.

To delete orders, on the selection screen, select the *Delete Using DELETE Command* field. If the report finds faulty orders, select the orders that you want to delete and enter **DELETE** in the command field.

With release SCM 5.0, you can use the program /SAPAPO/OM_CHECK_LIVECACHEDATA. To delete faulty orders, mark the orders you want to delete and choose *Delete*.

If you really need the orders, you have to transfer them again after the upgrade from the connected OLTP system.

A5 SAP liveCache/LCA Build Checks

This activity is mandatory.

You need to analyze the SAP liveCache and the LCA builds well before the upgrade as well as directly after the upgrade. To do this, you can use transaction the /SAPAPO/OM13, which is called when you choose the button for this step. Pay special attention to whether red lights are displayed. An information pushbutton next to the red lights explains how you can eliminate them.

🛕 Caution

RFC connections containing errors must be corrected before an upgrade. For more information, see SAP Note 305634 //>
Make sure that you use the user DDIC for the RFC connections.

Since only a limited number of partial checks are performed in the overview, a green light is never displayed.

A6 Perform Consistency Check for DP/SNP Time Series

This activity is mandatory.

The time that elapses between this check and *section B* of the report should be as short as possible. Once this step has been executed successfully, you must no longer make changes to planning areas (for example, changes to initialization horizons of planning areas, changes to initialization horizons of key figures, or changes to planning object structures). If you make changes to planning areas after performing this step, you must execute this step again.

A6 a) Perform Consistency Check for DP/SNP Time Series (LC vs. APO-DB)

In this step, the report /SAPAPO/TS_LCM_REORG is called. You must execute it using the *repair* option for each planning version. This reports checks the consistency of Demand Planning data stored in SAP liveCache as opposed to the data stored in the APO database. The main aim of this report is to check the existence of a corresponding record in the APO database for each object stored in SAP liveCache.

A6 b) Perform Consistency Check for SNP Time Series

In this step, the report /SAPAPO/TS_LCM_REORG_SNP is called. You must execute it using the *repair* option for each initialized SNP planning area.

Planning areas might be initialized for several planning versions.

A6 c) Perform Consistency Check for DP/SNP Time Series (APO-DB vs. LC)

In this step, the report /SAPAPO/TS_LCM_CONS_CHECK_ALL performs several checks concerning the integrity of the Demand Planning and Supply Network Planning data stored in the APO database. In addition, it checks the consistency of the related data stored in SAP liveCache. If it reports inconsistencies, you have to correct these inconsistencies manually, using the report /SAPAPO/TS_LCM_CONS_CHECK for the affected planning areas.

A6 d) Perform Consistency Check for DP/SNP Time Series (LC only)

In this step, the report /SAPAPO/OM_TS_LCCONS is called. This report checks the time series network, logical consistency, and data consistency of time series objects in SAP liveCache. You must execute the report with all three types of consistency checks in *check* mode for all existing planning versions. It is possible to parallelize the report per planning version. In case of reported errors, stop with the process and open a customer message on component BC-DB-LCA-DP.

A7 Perform Consistency Check for Time Streams

This activity is mandatory.

Caution

The report starts a batch job for each planning version in all SAP liveCache-relevant clients. This report checks and corrects time streams. You can find the log file in the application log with object APO and subobject UPGRADE.

Recommendation

If you want to administer your SAP liveCache with DBMGUI from a Windows PC, install the database manager GUI, which you can find on the SAP liveCache CD under

<CD drive>:\LC_WINDOWS_<processor>\SETUPS\DBM76.EXE

For the latest version of the database manager GUI, see SAP Service Marketplace at service.sap.com/ patches > Browse Download Catalog > Additional Components > MaxDB > MaxDB GUI COMPONENTS/ TOOLS .

End of: SAP SCM | Source Release = SAP SCM 4.0;SAP SCM 4.1;SAP SCM 5.0;SAP SCM 5.1 | Upgrade | Only valid for: SAP SCM | Source Release = SAP SCM 4.0;SAP SCM 4.1;SAP SCM 5.0;SAP SCM 5.1 | Upgrade |

5.3 Phase REQ_APOUPG<X>: Running Report /SAPAPO/ OM_LC_UPGRADE_70 – Section B

During phase $REQ_APOUPG<x>$, where <x> depends on your chosen upgrade strategy and archiving strategy, you perform all activities necessary to prepare SAP liveCache for the SAP system downtime and upgrade phase REQ_LCUPG , during which the SAP liveCache upgrade is performed.

The activities are listed in section B of report /SAPAPO/OM_LC_UPGRADE_70 (see SAP SCM: Planning the Upgrade of SAP liveCache and Optimizer [page 24]). The following activities are either mandatory, or recommended:

| Table 12 | |
|-----------------------------|-----------------------|
| Activity | Mandatory/Recommended |
| Download SAP liveCache data | Mandatory |
| Stop SAP liveCache | Mandatory |
| Complete backup | Recommended |

Procedure

Report /SAPAPO/OM_LC_UPGRADE_70

- 1. Call transaction SE38 in the SAP system.
- 2. Run the report /SAPAPO/OM_LC_UPGRADE_70.
- 3. Perform all mandatory activities of section B (see below).
- 4. Check whether you can benefit from any of the recommended activities in this section (see below) and, if yes, perform them.

B1 Download SAP liveCache Data

This activity is mandatory.

SAP liveCache transaction data is downloaded in parallel for all selected planning versions, and if desired, crossclient as well.

Ensure that there are enough dialog processes available (at least MAXCPU + 3 processes), so that you can minimize the total runtime.

To download the SAP liveCache data, choose the corresponding pushbutton.

You can view the logs by choosing Load Old Log.

You must not delete the logs until several weeks after the upgrade. This makes it easier for SAP Support to find errors if upgrade problems occur.

B2 Stop SAP liveCache

This activity is mandatory.

After successfully downloading the SAP liveCache data (verify that the download processes are completed and there are no changes to the transaction data in the system), stop SAP liveCache. Before successfully comparing the SAP liveCache data with the download in section C, changes to the transaction data are not allowed, otherwise data can be lost. Such changes are, for example, in Demand Planning initializing planning areas or changing the initialization horizon of planning areas or key figures, changes to the planning object structure, as well as the execution of consistency checks with the repair option. In addition, all write transactions and consistency checks of the other applications (such as /SAPAPO/OM17, CIF delta report, and others) must not be executed.

To stop the SAP liveCache, choose |> LCA > Administration > Operating] and then choose the Stop liveCache pushbutton.

B3 Complete Backup

This activity is recommended.

Perform a complete backup of SAP liveCache data, as described in the SAP liveCache documentation. Also, perform a complete backup of the SCM database.

End of: SAP SCM | Source Release = SAP SCM 4.0;SAP SCM 4.1;SAP SCM 5.0;SAP SCM 5.1 | Upgrade |

Only valid for: SAP SCM | Upgrade |

5.4 Phase REQ_LCUPG: Upgrading SAP liveCache and Performing Additional Activities

You start the SAP liveCache software and SCM Optimizer upgrade during this phase.

🛕 Caution

To enable you to switch from a non-liveCache platform (32-bit Windows; Tru64) to a SAP liveCache platform while installing a new SAP liveCache during your SAP SCM upgrade, you must make sure that the follow-up processing field in transaction LC10 is empty before initializing the new SAP liveCache. To check this, call transaction LC10 and choose I *Integration Reports Initialize liveCache*.

To upgrade the SAP liveCache, you must install the SAP SCM 7.0 EHP 4 version of the SAP liveCache software as described in the document *Upgrade - SAP liveCache Technology on <OS> - SCM <Release>*. You do not need to uninstall the old version of the SAP liveCache software.

If you use your SAP liveCache on a platform that is no longer supported, such as Windows 32-BIT or Tru64, you have to reinstall SAP liveCache 7.9 on a supported platform. In this case, you do not have to upgrade SAP liveCache. When you update the connectivity information in section C1 of the report /SAPAPO/ OM_LC_UPGRADE_70, the transactional data is loaded to the newly installed SAP liveCache.

🛕 Caution

If you have included additional Support Packages in the upgrade, you may have to update SAP liveCache and the SCM Optimizer to the corresponding versions. For more information, see SAP Service Marketplace at

▶ support.sap.com/sp-stacks > Information > Support Package Stack Schedule].

If you update SAP liveCache, you must do so before initializing SAP liveCache.

After installing SAP liveCache using at least version 7.9, upgrade the database client software for the host where the SAP central and dialog instances are running. For more information, see the document *Upgrade* - *SAP liveCache Technology on* <*OS*> - *SCM* <*Release*>. After that, run the report / SAPAPO/OM_LC_UPGRADE_70 and perform all mandatory activities in section C (see SAP SCM: Planning the Upgrade of SAP liveCache and Optimizer [page 24]). Make a complete backup of the SAP liveCache data and reinstall the SCM Optimizer.

🛕 Caution

36

If your source release is SCM 7.0 or higher, *C9 Complete Backup* and *Upgrade the Optimizer* are the only relevant activities for you in the *Phase REQ_LCUPG: Upgrading SAP liveCache and Performing Additional Activities* section. The upgrade of the liveCache data to SCM 7.04 occurs as an inplace upgrade (that is, within the liveCache itself). For more information about inplace upgrade, see the SAP liveCache upgrade guides at *Upgrade - SAP liveCache Technology on <OS> - SCM <Release>*. You can find the document on SAP Service Marketplace at *SAP service* service.sap.com/instguides SAP Business Suite Applications SAP SCM Server Using SAP enhancement package 4 for SAP SCM Server 7.0 Upgrade Guides .

Procedure

Upgrade SAP liveCache 7.9

Only SAP liveCache Version 7.9 is supported for SAP SCM 7.0 EHP 4. If you want to use the SAP liveCache recovery functions productively, note the following points regarding your SAP liveCache upgrade:

- Log and data devices must be located on separate disks.
- SAP liveCache on UNIX strongly recommends devices as raw devices for production operation.
- For production operation, you require a directory in the file system for intermediate backups of the log backups. This directory must contain free space that is twice the size of the log devices.
- Only valid for: UNIX |

When upgrading SAP liveCache on UNIX:

The size of the file system is limited by default to 2 GB for the supported UNIX operating systems. You can only increase this when creating the file system. The size of an SAP liveCache core dump can match the size of the SAP liveCache main memory, which is not limited to 2 GB.

For this reason, set the default value for the size of the SAP liveCache directory into which the core files are written, as well as the corresponding file system, to at least the size of your SAP liveCache main memory.

The procedure for each operating system is described in SAP Note 429215 Az.

End of: UNIX |

The procedure for upgrading SAP liveCache is described in the document *Upgrade* - SAP liveCache Technology on <0S> - SCM <Release>. You can find the document on SAP Service Marketplace at service.sap.com/instguides

SAP Business Suite Applications > SAP SCM > SAP SCM Server > Using SAP enhancement package 4 for SAP SCM Server 7.0 > Upgrade Guides].

Only valid for: IBM i5/OS |

Set Parameter BATCH HOST and Inactivate the Batch Capacity of the Central Instance

During downtime, the upgrade has changed the parameter BATCH HOST. You must set it again to the name of the Windows Application Server with the new kernel of release 7.0.

- 1. Call R3up'set stdpar' in the host where you are running the upgrade.
- 2. Enter the name of the upgrade directory.
- 3. When the program asks for the name of the BATCH HOST, enter the name of your Windows Application Server. In addition, you must deactivate the batch capacity of your central instance. Batch processes must run on the Windows Application Server.
- 4. Stop your central instance, change the profile value rdisp/wp_no_btc in /usr/sap/<SID>/SYS/ profile/<SID>_DVEBMGSnn_<HOSTNAME> to 0.
- 5. Start the central instance again.

End of: IBM i5/OS |

Only valid for: IBM i5/OS |

Upgrade Your Dialog Instance on the Windows Application Server

All transactions used in relation to SAP liveCache must be executed on the Windows Application Server. Therefore, before you can initialize SAP liveCache, you have to upgrade at least one dialog instance on a Windows Application Server. Proceed as follows:

- 1. To upgrade the dialog instance, replace the old kernel by a new kernel for release 7.0 (kernel for Windows).
- 2. Define the new environment variable DIR_LIBRARY_RMT = /usr/sap/<SID>/SYS/exe/run.

For more information about setting environment variables for the SAP kernel, see SAP Note 31559 &.

Load Transaction Data

- 1. Call transaction SE38 in the SAP system.
- 2. Run the report /SAPAPO/OM_LC_UPGRADE_70.
- 3. Perform all mandatory activities from section C (see below) in the right order.
- 4. Check whether you can benefit from any of the recommended or optional activities in the table below and if so, perform them.

| Table 13 | | |
|--|----------------------------------|--|
| Activity | Mandatory/Recommended/Optional | |
| Log Off and Start SAP liveCache | Mandatory | |
| Refresh Database Statistics | Mandatory | |
| Load Master Data | Mandatory | |
| Upload SAP liveCache Data | Mandatory | |
| Compare SAP liveCache with Download | Optional | |
| Convert Transport Requests | Mandatory if you are using TP/VS | |
| Perform SAP liveCache/LCA Build Checks | Mandatory | |
| Activate Logging | Mandatory | |
| Complete Backup | Mandatory | |
| Start CIF Queue | Recommended | |

Caution

You only need to perform the following step if you repeat section C:

Before you initialize SAP liveCache, you must clear the program name of the follow-up report for initialization in transaction LC10 for the connection LCA. Otherwise, all transaction data in the database is deleted.

C1 Log Off and Start SAP liveCache

This activity is mandatory.

i Note

Activities C2 to C6:

If you mark all checkboxes for these activities, they are processed in a row without further user input.

C2 Refresh Database Statistics

This activity is mandatory.

Refresh the database statistics.

1 Note

Refreshing database statistics before uploading the SAP liveCache data considerably reduces the time needed for the upload.

C3 Load Master Data

This activity is mandatory.

The program / SAPAPO/UPGRADE LC ANCHORS creates the master data in SAP liveCache.

To create the master data, choose the corresponding pushbutton.

C4 Upload SAP liveCache Data

This activity is mandatory.

SAP liveCache transaction data is uploaded in parallel for all selected planning versions, and if required, this can be also performed cross-client.

Ensure that there are enough dialog processes available (at least MAXCPU + 3 processes), so that you can minimize the total runtime.

To start the upload, choose the corresponding pushbutton. You can view the logs in the spool orders by choosing *Load Old Log*.

Do not delete the logs until several weeks after the upgrade. This makes it easier for SAP Support to find errors in case problems arise after the upgrade.

🔒 Caution

Do **not** perform any changes in the application environment until the upload of the SAP liveCache data (C5) and the subsequent comparison of the SAP liveCache data with the download (C6) have finished successfully and no errors have been reported.

If you perform changes in Demand Planning or Supply Network Planning before the comparison has finished successfully, for example, you deinitialize or initialize planning areas or perform consistency checks, you lose data.

C5 Compare SAP liveCache with Download

This activity is optional.

Data previously stored in the database is compared with the current data in SAP liveCache to ensure its consistency.

To start the comparison, choose the pushbutton for the step.

🛕 Caution

The data comparison can take nearly as long as the download itself.

C6 Convert Transport Requests

This activity is only mandatory if you are using Transportation Planning/Vehicle Scheduling (TP/VS) planning after the upgrade.

The report does the following:

It converts the TP/VS shipment from the old model to the model in release 7.0. The conversion is
performed automatically for all planning versions in all SAP liveCache-relevant clients. If you have not
used TP/VS planning in the source release or if no shipments exist in the source system, this step only
takes a few seconds.

 It updates the TP/VS order selection database table. The update is performed automatically for all orders relevant for TP/VS planning in all SAP liveCache-relevant clients. This step may take a long time if the order volume is large.

If errors occur, see the application log. To call up the application log, use the following parameters:

| Table 14 | |
|-----------|------------------------------|
| Object | SAP SCM |
| Subobject | UPGRADE |
| Program | /SAPAPO/VS_OM_UPGRADE_SCM_70 |

C7 Perform SAP liveCache/LCA Build Checks

This activity is mandatory.

You must analyze the SAP liveCache and the LCA build objects using transaction LCA13 directly after the upgrade. In particular, pay attention to whether red lights are displayed. An information pushbutton next to the red lights explains how you can eliminate them.

Since only a limited number of partial checks are performed in the overview, a green light is never displayed.

C8 Activate Logging

This activity is mandatory.

To improve performance of the uploads, SAP liveCache logging is deactivated during the upgrade. After the upgrade, you have to activate SAP liveCache logging and start SAP liveCache. If you choose *Activate Logging*, SAP liveCache logging is activated and the SAP liveCache is started automatically.

C9 Complete Backup

This activity is mandatory.

Perform a complete backup of the SAP liveCache data as described in the SAP liveCache documentation.

🛕 Caution

If problems occur, you may need to repeat section C and initialize the SAP liveCache again. Before initializing SAP liveCache, make sure that field *Fllw-up Procg* in transaction \triangleright *LC10* \Rightarrow *Administration Report* \Rightarrow *Initializing liveCache* \exists is **empty**.

Recommendation

Performing a complete backup of the SAP SCM database is also recommended.

C10 Start CIF Queue

This activity is recommended.

Depending on the configuration, the transfer of entries in CIF queues may be terminated in the connected ERP systems.

Therefore, you need to start the program /SAPAPO/RCIFRESTART. This updates the transfer that has been interrupted.

Upgrade the Optimizer

To upgrade the Optimizer to the required version, you simply install the new version of the SCM Optimizer. There is no need to delete the old SCM Optimizer.

For a detailed description of the installation, see the document IN *Installation Guide – SAP SCM Optimizer for SAP SCM 7.0 Including SAP Enhancement Package 4 on <OS>* This document contains all the necessary steps and information about supplementary SAP Notes.

Adjusting the Installation Path for the SCM Optimizer

In SAP SCM Optimizer 12.0, the default installation path has changed from APOOPT to SCMOPT. As opposed to older versions of SAP SCM Optimizer, where the default installation path was fixed, you can change this installation path as of SAP SCM Optimizer 12.0. The selected installation directory is later on referred to as <INST DIR> in this guide.

Furthermore, all subdirectories have been deleted so that any SAP SCM Optimizer executables are extracted directly to the chosen installation directory.

This means that after you have installed SAP SCM Optimizer 12.0, you must adjust the installation paths in your ABAP application server where SCM is installed.

To adjust the installation path, proceed as follows:

- 1. If you use a standalone gateway instance, start the gateway instance.
- 2. Log on to the ABAP application server.
- 3. Call transaction SM59. The Display and maintain RFC destinations screen appears.
- 4. Open the node *TCP/IP connection*.
- Double-click each SAP SCM Optimizer destination name. The default SAP SCM Optimizer destination is called OPTSERVER_<Optimizer01>, but if you set up RFC connections for additional SAP SCM Optimizer servers, you must change the installation paths for these as well.

The RFC Destination OPTSERVER_Optimizer01 screen appears.

6. On the *Technical Settings* tab page, in the *Program* field, check your program path, and change it.

📫 Example

Your program path should be <INST_DIR>\dsoptsvr.exe, for example.

For more information about the program paths for the RFC connections for different SAP SCM Optimizer servers, see section 5.2 Performing a Setup Check of the RFC Gateway in the Installation Guide SAP SCM Optimizer 12.0 or higher on <Your Operating System>, on the SAP Service Marketplace at service.sap.com/ instguides , under SAP Business Suite Applications SAP SCM SAP SCM Server Using SAP EHP 4 for SAP SCM Server 7.0 .

You can then continue with the SAP system upgrade.

End of: SAP SCM | Upgrade |

End of: Upgrade |

Follow-Up Activities 6

Only valid for: SAP SCM | Enhancement Package Installation; Upgrade |

6.1 Actions for SAP liveCache

After the upgrade and before starting production operation of the system, you need to make some preparations for restarting SAP liveCache.

For more information about the use of the report / sapapo/om lc upgrade 70, see SAP Note 1602966 /

Caution

If your source release is SCM 7.0 or higher, the Deleting the Download Data Table section is not relevant for you. For more information, see the SAP liveCache upgrade guides at Upgrade - SAP liveCache Technology on <OS> - SCM <Release>. You can find the document on SAP Service Marketplace at service.sap.com/

instguides 🖝 📏 SAP Business Suite Applications 📏 SAP SCM 📏 SAP SCM Server 📏 Using SAP enhancement package 4 for SAP SCM Server 7.0 > Upgrade Guides].

Procedure

Create an SAP liveCache Backup

Before you resume production operation, make a complete backup as a basis for any recoveries that may be required.

You need to back up the log files during production operation. If a log full situation arises, processing of the SAP liveCache transaction is stopped until the log file has been backed up.



Recommendation

Use the autosave log functions to stop SAP liveCache from hanging.

Central Authorization and Alert Monitor

Before restarting production operation, make sure that the central authorization and alert monitor have been reactivated.

Reactivate Interrupted CIF Activities

After the SAP system upgrade, you have to perform a number of activities. One of these activities is to reactivating interrupted CIF activities after SAP liveCache crashes or after SAP SCM system upgrades.

You can use the report / SAPAPO/RCIFRESTART to reactivate the CIF activities.

This program performs the following steps:

- Look for change of pointer entries in SAP SCM that indicate that the publication of planning results could not be terminated successfully.
- Look for CIF outbound queue entries (from SAP SCM to ERP systems) that have not been executed successfully and restart them.
- Restart the SAP SCM CIF inbound queues if any transfers to SAP SCM have not yet been processed.
- Determine the names of ERP systems integrated with this SAP SCM system.
- Restart the CIF outbound queues that point to this SAP SCM system.

Only valid for: IBM i5/OS |

SAP liveCache Access from IBM i5/OS Application Servers

As of SAP SCM 5.0 SP 03, you can configure your IBM i5/OS application servers to have direct access to the SAP liveCache. For more information, see SAP Note 1037016 2.

End of: IBM i5/OS |

End of: SAP SCM | Enhancement Package Installation;Upgrade |

Only valid for: SAP SCM | Enhancement Package Installation;Upgrade |

6.2 Adjusting the BW Authorizations

As of release SAP SCM 5.0, there have been changes in the BW authorization concept. Before you can start production operation, you must check whether it is necessary to adjust your authorization concept or migrate old authorizations.

1 Note

If you used the old BW authorization concept before the upgrade, you must switch to the new BW authorization concept after the upgrade.

Since the old concept is no longer supported as of release 5.0, you must migrate to the new concept as soon as possible.

For more information, see SAP Notes 1152453 / and 820183 / .

Procedure

- If you are not using the BW authorization concept in Demand Planning, proceed as follows:
 - 1. Decide if you want to grant your Demand Planning users full access to all planning object structures (as in the previous releases) including all InfoProviders. If this is the case, you should assign the generated authorization <code>OBI_ALL</code> in transaction <code>RSECADMIN</code> to all your Demand Planning users. Alternatively, you can include authorization <code>object s_RS_AUTH</code> with authorization <code>OBI_ALL</code> in the corresponding authorization role assigned to your Demand Planning users.
 - 2. If you want to set up restricted access to planning object structures, you need to introduce the new SAP NetWeaver BW analysis authorization.

For more information about using the BW authorization concept, see the SAP Library for SAP Supply Chain Management on SAP Help Portal at help.sap.com/scm704, under SAP Supply Chain Management (SAP SCM) > SAP Advanced Planning and Optimization (SAP APO) > Application Help >

Demand Planning > Technical Aspects of Demand Planning > Authorization in Supply Network and Demand Planning > Using the BI Authorization Concept in Demand Planning].

- If you are using the BW authorization concept for Demand Planning, proceed as follows:
 - 1. Mark the following special characteristics as authorization-relevant in transaction RSD1:
 - OTCAACTVT
 - OTCAIPROV
 - OTCAVALID

This setting is valid system-wide. It activates the BW analysis authorizations both for Demand Planning and for the complete SAP system.

2. Migrate old authorizations.

You can migrate these manually or use the migration help program RSEC_MIGRATION.

For more information about the migration help program, see SAP Help Portal at help.sap.com/nw703 />, under |> Application Help > Function-Oriented View > SAP NetWeaver by Key Capability > Information Integration by Key Capability > Business Intelligence > Data Warehousing > Data Warehouse Management > Authorizations > Analysis Authorizations].

End of: SAP SCM | Enhancement Package Installation;Upgrade |

Only valid for: SAP SCM | Source Release = SAP SCM 4.1;SAP SCM 5.0 | Upgrade |

6.3 Performing Follow-Up Activities for SAP SNC

1 Note

You only need to perform the follow-up activities if you have used ICH in your source release.

As of SAP SCM 5.1, the component ICH has been renamed to SAP Supply Network Collaboration (SNC). Before you can use your SAP system productively after the upgrade, you need to perform some manual follow-up activities if you used ICH in your source release.

Procedure

Follow-up Activities for Special Scenarios

Perform the follow-up activities as described in SAP Note 1019288 Az.

Activating Services for the Web UI

To be able to use the Web user interface for SAP SNC, you must check existing and activate new services with transaction HTTP Service Hierarchy Network (transaction SICF). For more information, see the configuration documentation for one of the following SAP SNC scenarios in SAP Solution Manager under:

- Solutions SAP for Automotive Scenarios Supplier Managed Inventory/Release Processing/Web-Based Supplier Kanban I
- Solutions > SAP for Consumer Products > Scenarios > Responsive Replenishment >

 Solutions > SAP for High Tech > Scenarios > Contract Manufacturing Procurement/Supply Network Inventory/Work Order Collaboration]. Choose the section |> Basic Settings for SAP Supply Network Collaboration > Maintaining Settings for Service and Single Sign-On Activation].

Configuring the SAP ICH 5.0 Compatibility Mode

As of SAP SNC 5.1, there are new message interfaces, new proxies, and new Business Add-Ins (BAdIs) for inbound and outbound message processing available that use SAP SNC in the standard system. However, if you have enhanced message interfaces in SAP ICH 5.0, for example, with your own fields, or have implemented SAP ICH 5.0 BAdIs, and want to continue to use the message interfaces, proxies, or BAdIs from SAP ICH 5.0 in SAP SNC 5.1 and later, you have to configure the SAP ICH 5.0 compatibility mode. In Customizing for *Supply Network Collaboration*, choose Basic Settings Processing Inbound and Outbound Messages SAP ICH 5.0 Compatibility Mode **1**.

For more information, see the Customizing documentation.

End of: SAP SCM | Source Release = SAP SCM 4.1;SAP SCM 5.0 | Upgrade |

Only valid for: SAP SCM | Upgrade |

6.4 Changing the Enhancement Technique (User Exists) in the CIF Area

Procedure

After the upgrade from source releases SCM 4.1 and SCM 5.0, the SCM enhancements for products and locations APOCF001, APOCF005, APOCF31, APOCF32, APOCF035, APOCF36, APOCF38 and the Source of Supply Data/ External Procurement (SOS) APOCF026 are no longer processed when data is transferred from SAP ERP to SAP SCM.

The enhancement APOCF001 has already been migrated to BAdl definition SMOD APOCF001.

The enhancement APOCF005 has already been migrated to BAdl definition SMOD APOCF005.

The enhancement APOCF31 has already been migrated to BAdl definition SMOD_APOCF31.

The enhancement APOCF32 has already been migrated to BAdl definition SMOD_APOCF32.

The enhancement APOCF035 has already been migrated to BAdl definition SMOD_APOCF035.

The enhancement APOCF036 has already been migrated to BAdl definition SMOD_APOCF036.

The enhancement APOCF038 has already been migrated to BAdl definition SMOD_APOCF038.

You need to change the enhancement technique for APOCF001, APOCF005, APOCF31, APOCF32, APOCF035, APOCF36 and APOCF38 as described in SAP Note 1269674 2.

User exit definitions to Process Customer-Specific Source of Supply data are missing in SCM Basis. For more information about how to find the new BAdI, see SAP Note 1428977 &.

End of: SAP SCM | Upgrade |

Only valid for: SAP SCM | Upgrade |

6.5 Performing Follow-Up Activities for the SNP Optimizer

Procedure

Adjusting SNP Optimizer Profile

Several functions of the SNP Optimizer were fundamentally revised. Before converting your SNP Optimizer profile data, see the following SAP Notes, and implement them if they apply to you:

- 436949
- 573512

Adjusting BAdI Implementation for Maintaining Interchangeability Costs

The interchangeability processes in the SNP Optimizer have been changed. If you have used the BAdl implementation to maintain interchangeability costs as PPM costs in your source release, you must modify this implementation as described in SAP Note 1049026 .

End of: SAP SCM | Upgrade |

Only valid for: SAP SCM | Source Release = SAP SCM 5.0 | Upgrade |

6.6 Clearing the Cache for Service Parts Planning

Procedure

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If your source release is SCM 5.0, you must run the report RSUPGSPPSAPGUI before you start with testing or before you start production operation at the latest. The report clears a cache that has been built in SAP SCM 5.0 to avoid short dumps of some of the Service Parts Planning (SPP) transactions in your target release.

End of: SAP SCM | Source Release = SAP SCM 5.0 | Upgrade |

Only valid for: Source Release = SAP SCM 5.1 |

6.7 Adjusting the TPOP Forecast Profiles in Service Parts Planning

When using the TPOP forecast with Service Parts Planning (SPP), make sure that after an upgrade from SCM 5.1, the report /SAPAPO/PPR_UPD has been executed exactly once. This report determines the planning profiles containing an SCM 5.1 forecast profile in which you have chosen the TPOP forecast as type for the forecast run. In these planning profiles, the report replaces regular forecast services by the appropriate TPOP forecast services. In detail, the report makes the following replacements in the affected planning profiles:

- SPP_FCS_SERVICE is replaced by SPP_FCS_SERVICE_TPOP
- SPP_FCS_SERVICE_MSE is replaced by SPP_FCS_SERVICE_MSE_TPOP

- SPP FCST RELEASE is replaced by SPP FCST RELEASE TPOP
- SPP_RECALC_HISTFCST is replaced by SPP_RECALC_HISTFCST_TPOP

Enter all planning profiles in the report and choose Execute.

End of: Source Release = SAP SCM 5.1 |

Only valid for: SAP SCM | Upgrade |

6.8 Performing Follow-Up Activities for SAP Forecasting & Replenishment

During the first run of the Forecasting and Replenishment Processor (FRP) after the upgrade, additional activities are performed that may lead to an increased runtime.

Procedure

For more information and a detailed procedure, see SAP Notes 1250862 / and 1656160 /.

End of: SAP SCM | Upgrade |

Only valid for: SAP SCM | Source Release = SAP SCM 4.0; SAP SCM 4.1; SAP SCM 5.0; SAP SCM 5.1 | Enhancement Package Installation; Upgrade |

6.9 Deleting the Download Data Table

After the upgrade, you no longer need the table containing the download data. However, you should keep the table for reference in case problems occur after the upgrade. After about four weeks, you can delete the table to increase the free space on the database.

Procedure

Execute the report /SAPAPO/OM_LC_UPGRADE_70 in section D (see SAP SCM: Planning the Upgrade of SAP liveCache and Optimizer [page 24]) to delete the table containing the download data. End of: SAP SCM | Source Release = SAP SCM 4.0;SAP SCM 4.1;SAP SCM 5.0;SAP SCM 5.1 | Enhancement Package Installation;Upgrade | Only valid for: SAP SCM | Upgrade |

6.10 New Authorization Object in the SNP Transport Load Builder (TLB)

As of SCM 7.0 the system checks the authorization object C_APO_TLAN for each transportation lane that has been selected for planning in /SAPAPO/SNP04. If a proper authorization is missing, the report skips the transportation

lane and creates an entry into the application log. Therefore, you should adjust your processes if you have not used this authorization object before.

End of: SAP SCM | Upgrade |

Only valid for: SAP SCM | Enhancement Package Installation |

6.11 Updating the LCA Build and SAP SCM Optimizer

Procedure

To complete the installation of enhancement package 4 for SAP SCM 7.0 you have to update the LCA Build and SAP SCM Optimizer.

End of: SAP SCM | Enhancement Package Installation |

Typographic Conventions

| Table 15 | |
|---------------------|--|
| Example | Description |
| <example></example> | Angle brackets indicate that you replace these words or characters with appropriate entries to make entries in the system, for example, "Enter your <user name=""></user> ". |
| Example > Example | Arrows separating the parts of a navigation path, for example, menu options |
| Example | Emphasized words or expressions |
| Example | Words or characters that you enter in the system exactly as they appear in the documentation |
| www.sap.com | Textual cross-references to an internet address |
| /example | Quicklinks added to the internet address of a homepage to enable quick access to specific content on the Web |
| 123456 🏕 | Hyperlink to an SAP Note, for example, SAP Note 123456 |
| Example | Words or characters quoted from the screen. These include field labels, screen titles, pushbutton labels, menu names, and menu options. Cross-references to other documentation or published works |
| Example | Output on the screen following a user action, for example, messages Source code or syntax quoted directly from a program File and directory names and their paths, names of variables and parameters, and names of installation, upgrade, and database tools |
| EXAMPLE | Technical names of system objects. These include report names, program names, transaction codes, database table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE |
| EXAMPLE | Keys on the keyboard |

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