

Note: 000067

Overview

| | |
|-------------|---|
| Number | 000067 |
| Description | BCS 3.0 Additional Installation / Upgrade Information |
| Version | 51 from 28.04.2025 |
| Status | Released to Customer |
| Language | EN |
| Responsible | John Mantle |
| Product | BCS |
| Category | Technical Installation |

Symptom

Note: The term "30x" is used to refer to all levels of BCS 3.0 - currently:

- 30A (ECC 600)
- 30B (S/4HANA)

You install the BCS component containing the 30x BCP and BCG products on SAP ECC 6.0 or S/4HANA. You would like to know if any changes have been made to the standard installation guide, or if any further steps are necessary in addition to the standard guide.

Cause

1. Additional steps may be recommended for installs or upgrades of the specific versions of QuantityWare products.
2. QuantityWare is constantly developing its products and responding to customer needs. All non-customer specific functional and customising extensions will be included in CSPs (Component Support Packages), however there are periods between CSP releases when customers should implement QuantityWare Notes into their systems to ensure they have access to all functionality and resolve specific issues.

Solution

Customising extension issues:

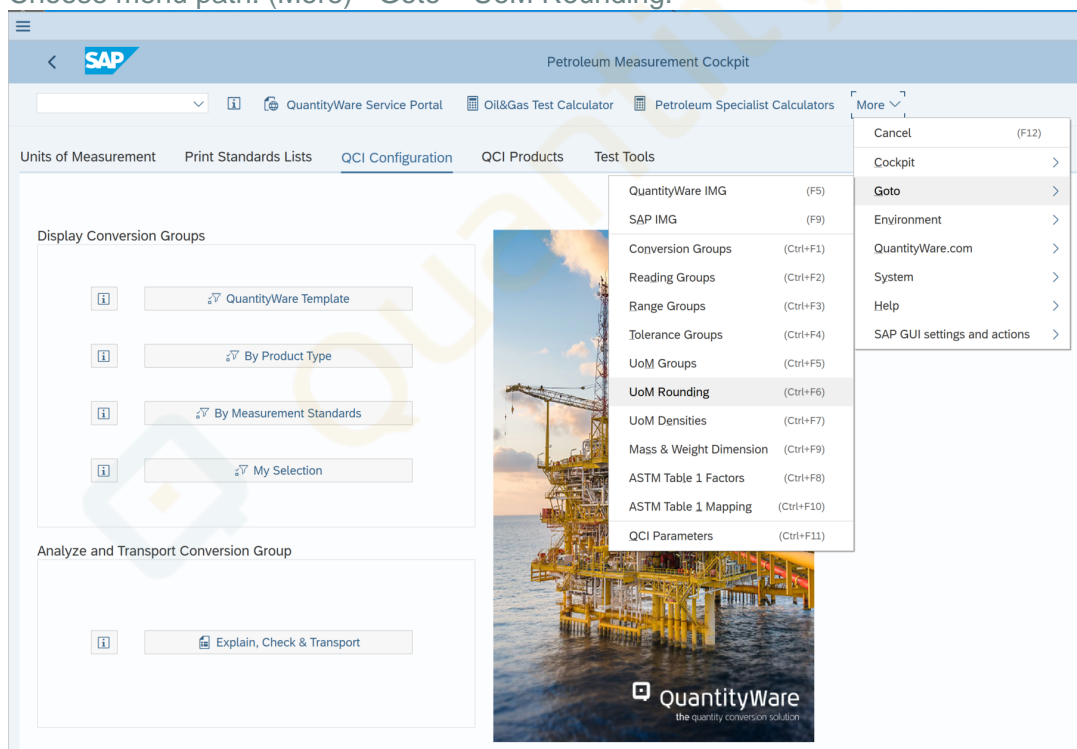
NOTE:

This action may be required only if you are **UPGRADING** from BCP10A, BCP10B or an installation where customising entries have been distributed into QuantityWare customizing tables in client 000.

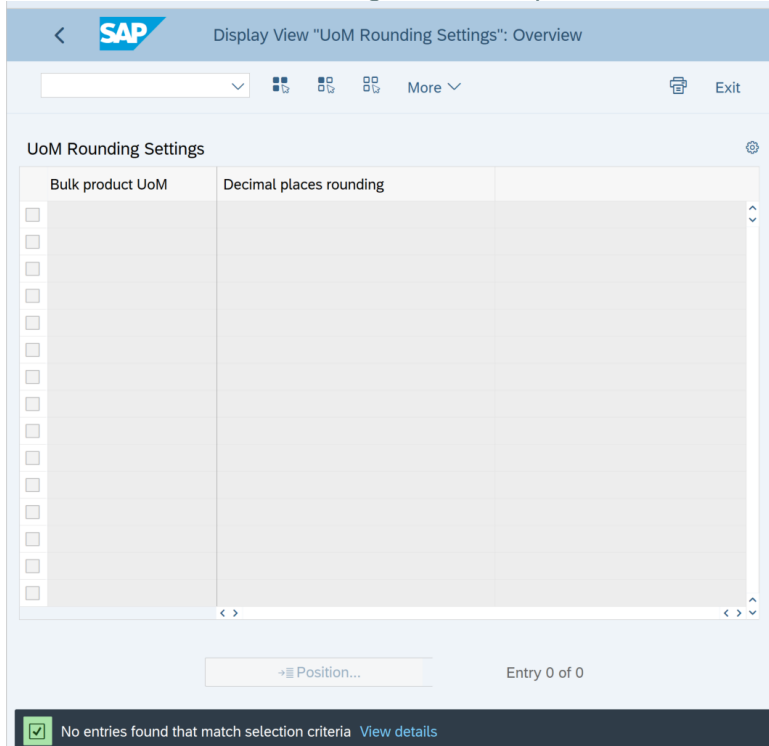
With BC set /QTYW/BCP_30x or /QTYW/BCG_30x, QuantityWare delivers many new entries that are required for the installation test. Additional entries may lead to calculation deviations between expected and actual results and thus may show up as an error in various test reports.

After you have created the template client 045, and before you activate the QuantityWare BC set /QTYW/BCP_30x or /QTYW/BCG_30x, you should perform the following steps (in client 045):

1. Start the Petroleum Measurement Cockpit(transaction /qtyw/cockpit) or the Gas Measurement Cockpit (transaction /qtyw/cockpit_gas).
Choose menu path: (More) - Goto – UoM Rounding:



2. Ensure that no UoM rounding entries are present:



If this is the case, you may continue with the activation of BC set /QTYW/BCP_30x.

If entries are present, you should delete all entries:

- Choose "Display – Change (CTRL + F1)" and mark all entries.
- Delete all entries.
- Save your action using a temporary customizing transport.

SAINT Import:

1. Stop on error: "The pre-requisites are not fulfilled":

You MUST have a valid maintenance certificate installed in your system before you can import ANY package via SAINT or SPAM functionality.

2. "Signature File Missing":

See SAP Note 2645739 and this QuantityWare [FAQ](#).

3. BCS 30A only - Stop on Queue Calculation error: SAP_FIN:

We have no dependencies to the SAP_FIN or SAP_APPL components, however SAP forces this (for our delivery, unnecessary) check.

We have provided a work-around for our customers in the form of an “ACP” – “Attribute Change Package”, available in the “Installation / Upgrade Packages” area of our service portals’ “DataLounge”.

The archive QW_BCS_30A_600_IN-ACP03.SAR contains the appropriate ACP file QOI0020247836_0000067.PAT which MUST be present in the EPS/in directory before calling SAINT to “Load Packages”.

If SAINT has uploaded the file successfully, you will see the entry e.g. “QTYW=====30A” in the list of uploaded packages. This package modifies the requirements of the BCS 3.0 installation package e.g. SAPK-30A00INQTYW and avoids an error in the “Check Requirements” phase.

The Archive name and PAT file may be updated in future, resulting in higher version numbers.

Only the most actual ACP file will be available in the “DataLounge”.

4. Installation file sizes:

Sometime, issues can occur when archives are extracted leading to incorrect file sizes. Based upon Windows operating systems, the QuantityWare packages should have the following sizes:

| File | Size |
|---------------------------|------------------------------------|
| QW_BCS_30A_600_IN.SAR | 37.152.748 bytes (DIR_TRANS) |
| QW_BCS_30A_600_UP.SAR | 37.156.738 bytes (DIR_TRANS) |
| QOI0020247836_0000062.PAT | 40.708.204 bytes (DIR_EPS_ROOT\in) |
| QOI0020247836_0000066.PAT | 40.711.460 bytes (DIR_EPS_ROOT\in) |
| QW_BCS_30B_1610_IN.SAR | 37.984.438 bytes (DIR_TRANS) |
| QW_BCS_30B_1610_UP.SAR | 37.989.767 bytes (DIR_TRANS) |
| RS40090205598_0000006.PAT | 41.658.387 bytes (DIR_EPS_ROOT\in) |
| RS40090205598_0000007.PAT | 41.661.975 bytes (DIR_EPS_ROOT\in) |

Note: Validate the SHA-512 checksums of all files downloaded from the QuantityWare service portal before applying them to your systems!

The output of a sapcar -tvf command on the file (e.g. QW_BCS_30A_600_IN.SAR) should look like this:

```
T:\trans>sapcar64 -tvf QW_BCS_30A_600_IN.SAR
SAPCAR: processing archive QW_BCS_30A_600_IN.SAR (version 2.01)
-rw----- 40708204 10 Aug 2016 11:55 EPS/in/QOI0020247836_0000062.PAT
```

Additional CSPs:

The following CSPs have been released or are planned for release on the dates below:

| Solution | Package | Release Date |
|----------|---------|---------------|
| BCS 30A | CSP 001 | 31 March 2017 |
| BCS 30A | CSP 002 | 20 Sept. 2021 |
| BCS 30A | CSP 003 | 18 Dec. 2023 |
| BCS 30A | CSP 004 | Q4 2025 |
| BCS 30B | CSP 001 | 20 Sept. 2021 |
| BCS 30B | CSP 002 | 18 Dec. 2023 |
| BCS 30B | CSP 003 | Q4 2025 |

NOTE: Include ALL available CSP's when installing or upgrading QuantityWare solutions.

BC Set Activation Errors:

SAP has resolved the inconsistencies in the SAP functionality regarding the activation of BC-Sets containing "FLTP" and "QUAN" data types, thus the workaround is no-longer necessary - SEE FOLLOWING COMMENT:

>>> NEW: APRIL 2025 >>>>>>>>>>>>>

We have received a ticket from a customer who has had the following error when trying to activate the BC-Set in the latest version of S/4HANA 2023, with the decimal separator in their user profile set to point (".").

Category ABAP programming error
Runtime Errors DBSQL_SQL_ERROR
Except. CX_SY_OPEN_SQL_DB
ABAP: Program CL_SCPR_DB_TABLE_CONTENT=====CP
Application Component BC-CUS-TOL-BCD
Date and Time 04-25-2025 16:21:15 (CST)

| Short Text
| SQL error "SQL code: 314" occurred while accessing table "/QTYW/UOMREF".

|What happened?

```
Database error text: "SQL message: numeric overflow: Failed in "STD_FACTOR"
column with the value 1000000000000.000000000000"
```

With this workaround, the user changed the decimal separator to comma (",")

SAP GUI - System -> User Profile -> User Data -> Defaults ->
Decimal Notation -> (set to) 1.234.567,89 (then log off and log back on)

...and was able to successfully activate the BC-Set.

After BC-Set activation, reset your "Decimal Notation" to your standard value (log off and log back on) - this setting is **ONLY** required for the BC-Set activation.

This is similar to the error encountered pre-2019. If you encounter this error, try the above workaround to activate the BC-Set and then open a ticket with SAP as the logic within the BC-Set creation and transaction is the responsibility of SAP.

On S/4HANA versions 2020 - 2023 (initial release) the user profile decimal separator did not affect the BC-Set activation.

As SAP performs maintenance to earlier releases of S/4HANA, this code change (SAP BASIS) may also be migrated to the latest maintenance versions of earlier releases, thus this error may also appear in such systems (SAPK-755BFINSAPBASIS works correctly, SAPK-758BFINSAPBASIS appears not to).

[illegible]

ORACLE Databases: If the person who activates the BC-Set does not use the defined decimal notation setting (remember to logout and log on again to "activate" the setting), hard errors can occur during the BC-Set activation such as "ORA-01438: value larger than specified allowed for this column". In this case, in the correct client, select the correct decimal notation settings, log off, log back on to the client and restart the BC-Set activation process. It should complete without error.

S/4HANA Compatibility:

Principally, we will seek to support the usage of our BCS package on every S/4HANA release for which SAP releases SAP Oil & Gas. The first S/4HANA release to do so was 1610.

The BCS 3.0 solution with the release version **30B** has been certified for use with SAP Oil & Gas as detailed in **QW Note 000086** (section "Release Lifecycle").

After the initial technical SAINT installation on an S/4 platform, or SUM upgrade to S/4 is complete, you **MUST** apply **SAP Note 2327999** (<https://launchpad.support.sap.com/#/notes/2327999>) to ensure that the necessary QuantityWare Data Dictionary is available in your system (i.e. before performing the “Post Installation / Upgrade Actions” section of the installation guide).

The installation archive "QW_BCS_30B_1610_<UP/IN>.SAR" is valid for **ALL** supported S/4 HANA releases.

Additional Notes:

Apply only notes that are listed as being valid for your HIGHEST, applied CSP.
For example, if you have 30A CSP001 installed, apply notes marked with "30A 02" to your system.

All CSP level-dependent notes are included in the next highest CSP.
For example, all notes marked with "30B 01" are included in 30B CSP001

These Notes should be imported in the ascending order listed below to ensure access to all functionality and remove known issues.

If Notes are relevant for multiple CSP levels, they are defined as such below (e.g. "ALL").

| CSP level | Note | Description |
|--|-------------|--|
| ALL | Note 000030 | Technical customizing table entries – table OIB07 |
| ALL | Note 000056 | BCS CSP03 Authorizations |
| 30A (ECC) Notes | | |
| 30A 00 | Note 000069 | C to ABAP Migration Tool – Enhancements & Corrections |
| 30A 00 | Note 000070 | ISO 6578 -LNG: intermediate parameter rounding – additional option for molar volumes Vi rounding |
| "00" Notes above are included in 30A CSP001 | | |
| 30A 01 | Note 000071 | DB lock on table /QTYW/ISO91_SL |
| 30A 01 | Note 000074 | Support of ASTM D1555(M)-2016 |
| 30A 01 | Note 000075 | SPAU_ENH forces usage of /QTYW/ Repair Key |
| 30A 01 | Note 000078 | AGA Report No. 7 - Atmospheric Pressure Calculation |
| 30A 01 | Note 000077 | BCS 30x Collective Note - Corrections & Enhancements |
| 30A 01 | Note 000079 | Business Document Analysis - Automatically Generated Lines |
| 30A 01 | Note 000076 | ISO 6578:2017 Compliance Enhancements |
| 30A 01 | Note 000080 | Support of ASTM D1550-18 Butadiene - ASTM D2962 Compliance Confirmation |
| 30A 01 | Note 000081 | SAP Note 397003 Integration |
| 30A 01 | Note 000082 | Business Document Analysis - Initial UoM MSEGO2 Lines |
| 30A 01 | Note 000083 | PMC & GMC Adjustments - Long Material Number in S/4HANA |
| 30A 01 | Note 000084 | PMC & GMC Enhancements - Installation Test & SAP IMG |

| | | |
|--------|-------------|---|
| 30A 01 | Note 000088 | BCS Test Scenario Tool Corrections |
| 30A 01 | Note 000089 | BCS Usage Key Installation Handling |
| 30A 01 | Note 000090 | ASTM D1250-19 Support |
| 30A 01 | Note 000091 | Scenarios: Calculate expected results fails |
| 30A 01 | Note 000097 | BCS Cockpit Authorisations and Considerations |
| 30A 01 | Note 000096 | MS-19 Emulsified Asphalt |

"01" Notes above are included in 30A CSP002

| | | |
|--------|------------|---|
| 30A 02 | Note 00104 | PMC - Conversion group model check - incorrect error log |
| 30A 02 | Note 00105 | SAP QCI TAS - Density UoM Tolerance/Defaulting |
| 30A 02 | Note 00103 | BCS 30x Collective Note - Corrections & Enhancements II |
| 30A 02 | Note 00102 | Anhydrous Ammonia Quantity Conversions |
| 30A 02 | Note 00107 | Default Test Density UoM for Range Checks & IDOC processing |
| 30A 02 | Note 00109 | MQCI Dialog box - document display shows incorrect UoM |
| 30A 02 | Note 00108 | Advanced Development - ABNT NBR 5992 (2016) |
| 30A 02 | Note 00100 | Advanced Development - High Pressure Hydrogen Quantity Conversions |
| 30A 02 | Note 00110 | Material overview lists shows incorrect conversion group status for hydrogen |
| 30A 02 | Note 00114 | Advanced Development - Brazilian Standard RESOLUÇÃO ANP Nº 894 2022 - RESOLUÇÃO CNP Nº 6 - 70 : Tables I & II |

"02" Notes above are included in 30A CSP003

| | | |
|--------|------------|---|
| 30A 03 | Note 00118 | Runtime error CONVT_NO_NUMBER in report /QTYW/CP_QW_BCSET_UOM |
| 30A 03 | Note 00116 | BCS 30x Collective Note - Corrections & Industrial Gases - Enhancements |
| 30A 03 | Note 00119 | Test Scenario & Installation Test - Usability |
| 30A 03 | Note 00122 | DIN 51650 Rounding Issue VOL to VOL |
| 30A 03 | Note 00123 | SYS data enrichment in Installation Test Log |
| 30A 03 | Note 00124 | ABNT NBR 5992 - 2016 Range Extensions |

"03" Notes above are included in 30A CSP004

30B (S/4HANA) Notes

| | | |
|--------|-------------|---------------------------------|
| 30B 00 | Note 000071 | DB lock on table /QTYW/ISO91_SL |
|--------|-------------|---------------------------------|

| | | |
|--------|-------------|---|
| 30B 00 | Note 000074 | Support of ASTM D1555(M)-2016 |
| 30B 00 | Note 000075 | SPAU_ENH forces usage of /QTYW/ Repair Key |
| 30B 00 | Note 000078 | AGA Report No. 7 - Atmospheric Pressure Calculation |
| 30B 00 | Note 000077 | CS 30x Collective Note - Corrections & Enhancements |
| 30B 00 | Note 000079 | Business Document Analysis - Automatically Generated Lines |
| 30B 00 | Note 000076 | ISO 6578:2017 Compliance Enhancements |
| 30B 00 | Note 000080 | Support of ASTM D1550-18 Butadiene - ASTM D2962 Compliance Confirmation |
| 30B 00 | Note 000081 | SAP Note 397003 Integration |
| 30B 00 | Note 000082 | Business Document Analysis - Initial UoM MSEGO2 Lines |
| 30B 00 | Note 000083 | PMC & GMC Adjustments - Long Material Number in S/4HANA |
| 30B 00 | Note 000084 | PMC & GMC Enhancements - Installation Test & SAP IMG |
| 30B 00 | Note 000088 | BCS Test Scenario Tool Corrections |
| 30B 00 | Note 000089 | BCS Usage Key Installation Handling |
| 30B 00 | Note 000090 | ASTM D1250-19 Support |
| 30B 00 | Note 000091 | Scenarios: Calculate expected results fails |
| 30B 00 | Note 000094 | Belize Theme:QuantityWare pictures appear distorted |
| 30B 00 | Note 000097 | BCS Cockpit Authorisations and Considerations |
| 30B 00 | Note 000096 | MS-19 Emulsified Asphalt |

"00" Notes above are included in 30B CSP001

| | | |
|--------|------------|--|
| 30B 01 | Note 00104 | PMC - Conversion group model check - incorrect error log |
| 30B 01 | Note 00105 | SAP QCI TAS - Density UoM Tolerance/Defaulting |
| 30B 01 | Note 00103 | BCS 30x Collective Note - Corrections & Enhancements II |
| 30B 01 | Note 00102 | Anhydrous Ammonia Quantity Conversions |
| 30B 01 | Note 00107 | Default Test Density UoM for Range Checks & IDOC processing |
| 30B 01 | Note 00109 | MQCI Dialog box - document display shows incorrect UoM |
| 30B 01 | Note 00108 | Advanced Development - ABNT NBR 5992 (2016) |
| 30B 01 | Note 00100 | Advanced Development - High Pressure Hydrogen Quantity Conversions |
| 30B 01 | Note 00110 | Material overview lists shows incorrect conversion group status for hydrogen |

| | | |
|--------|------------|--|
| 30B 01 | Note 00114 | Advanced Development - Brazilian Standard RESOLUÇÃO ANP Nº 894 2022 - RESOLUÇÃO CNP Nº 6 - 70 : Tables I & II |
|--------|------------|--|

"01" Notes above are included in 30B CSP002

| | | |
|--------|------------|--|
| 30B 02 | Note 00118 | Runtime error CONVT_NO_NUMBER in report /QTYW/CP_QW_BCSET_UOM |
|--------|------------|--|

| | | |
|--------|------------|---|
| 30B 02 | Note 00116 | BCS 30x Collective Note - Corrections & Industrial Gases - Enhancements |
|--------|------------|---|

| | | |
|--------|------------|---|
| 30B 02 | Note 00119 | Test Scenario & Installation Test - Usability |
|--------|------------|---|

| | | |
|--------|------------|-------------------------------------|
| 30B 02 | Note 00122 | DIN 51650 Rounding Issue VOL to VOL |
|--------|------------|-------------------------------------|

| | | |
|--------|------------|--|
| 30B 02 | Note 00123 | SYS data enrichment in Installation Test Log |
|--------|------------|--|

| | | |
|--------|------------|---------------------------------------|
| 30B 02 | Note 00124 | ABNT NBR 5992 - 2016 Range Extensions |
|--------|------------|---------------------------------------|

"02" Notes above are included in 30B CSP003

Change History:

| Version | Date | Changes |
|---------|------------|---|
| 00 | 29.09.2016 | Initial release |
| 01 | 03.11.2016 | Added: Note 000069 |
| 02 | 03.11.2016 | S/4HANA 1610 info. added; Minor typo. corrections |
| 03 | 03.11.2016 | CSP01 Release date corrected, Added Note 000070 |
| 04 | 03.11.2016 | ACP description |
| 05 | 19.04.2017 | Added: Note 000071 |
| 06 | 02.08.2017 | Generic 30\$ references added and 30B references |
| 07 | 16.11.2017 | 1709 References added & new notes |
| 08 | 06.06.2018 | Added: Note 000078 |
| 09 | 28.09.2018 | Added: Note 000077 |
| 10 | 14.11.2018 | Added: Note 000079 |
| 11 | 22.01.2019 | Added: Note 000076 |
| 12 | 06.03.2019 | Added: Note 000080 |
| 13 | 03.04.2019 | Added: Note 000081 |
| 14 | 17.04.2019 | Added: Note 000082 |
| 15 | 14.06.2019 | 1809 References added and BC-Set warning removed |
| 16 | 10.07.2019 | Added: Note 000083 |
| 17 | 19.07.2019 | Added: Note 000084 |
| 18 | 05.11.2019 | Added: Note 000088 |
| 19 | 15.11.2019 | Added: Note 000089 |
| 20 | 20.11.2019 | 1909 Reference added |
| 21 | 29.01.2020 | CSP Release date update |

| | | |
|----|------------|--|
| 22 | 04.02.2020 | Added: Note 000091 |
| 23 | 10.03.2020 | Added: Note 000090 |
| 24 | 08.06.2020 | Added: Note 000094 |
| 25 | 18.01.2020 | 2020 Reference added |
| 26 | 21.01.2020 | Added: Note 000097 |
| 27 | 02.02.2021 | Minor changes and 2020_EX references |
| 28 | 11.02.2021 | Added: Note 000096 |
| 29 | 09.07.2021 | Modified upgrade texts |
| 30 | 11.09.2021 | Added: CSP release and minor changes |
| 31 | 29.10.2021 | Added: Note 00104 |
| 32 | 09.11.2021 | S/4 HANA (_EX) 2021 Certification |
| 33 | 25.11.2021 | Added: Note 00105 |
| 34 | 07.02.2022 | Added: Note 00103 |
| 35 | 09.02.2022 | Added: Note 00102 |
| 36 | 11.02.2022 | Added: Note 00107 |
| 37 | 05.04.2022 | Added: Note 00109 |
| 38 | 06.04.2022 | Added: Note 00108 |
| 39 | 12.07.2022 | Added CSP release and minor changes |
| 40 | 13.07.2022 | Added: Note 00100 |
| 41 | 30.09.2022 | Added: Note 00110 |
| 42 | 30.09.2022 | Formal changes |
| 43 | 22.06.2023 | Added: Note 00114 |
| 44 | 18.12.2023 | Added CSP release and minor changes |
| 45 | 15.02.2024 | Minor explanation and formatting changes |
| 46 | 16.02.2024 | Added: Note 00118 |

- 47 04.04.2024 Added: Note 00116
- 48 27.05.2024 Added: Note 00119 + minor changes
- 49 23.10.2024 Added: Note 00122
- 50 21.12.2024 Added: Note 00123 + Note 00124



Transport Reference

| SAP Release | Transport | File Name | Notes |
|-------------|-----------|----------------------|-------|
| ECC600 | - | See individual notes | |
| S/4 HANA | - | See individual notes | |

Validity

| SAP Release | From SP | To SP | In SP Shipment |
|-------------|---------|-------|----------------|
| ECC600 | All | All | - |
| S/4 HANA | All | All | - |