QuantityWare

Bulk Calculations – Solution BCS 10B

Release Notes

Maintenance Level 03

Listing of delivery content
shipped with BCS CSP03

24.07.2020

Notes:

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BULK CALCULATIONS – SOLUTION BCS 10B I

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Introduction

As described in the BCS 10B Release Notes for maintenance level 00 http://www.quantityware.com/_data/BCS_10B_ReleaseNotes_00.pdf, the QuantityWare products BCP and BCG are technically delivered in a single package via a single component BCS (Bulk Calculations – Solution).

The BCS 10B Release Notes for maintenance level 01 (CSP01) can be found here: http://www.quantityware.com/_data/BCS_10B_ReleaseNotes_01.pdf

The BCS 10B Release Notes for maintenance level 02 (CSP01) can be found here: http://www.quantityware.com/_data/BCS_10B_ReleaseNotes_02.pdf

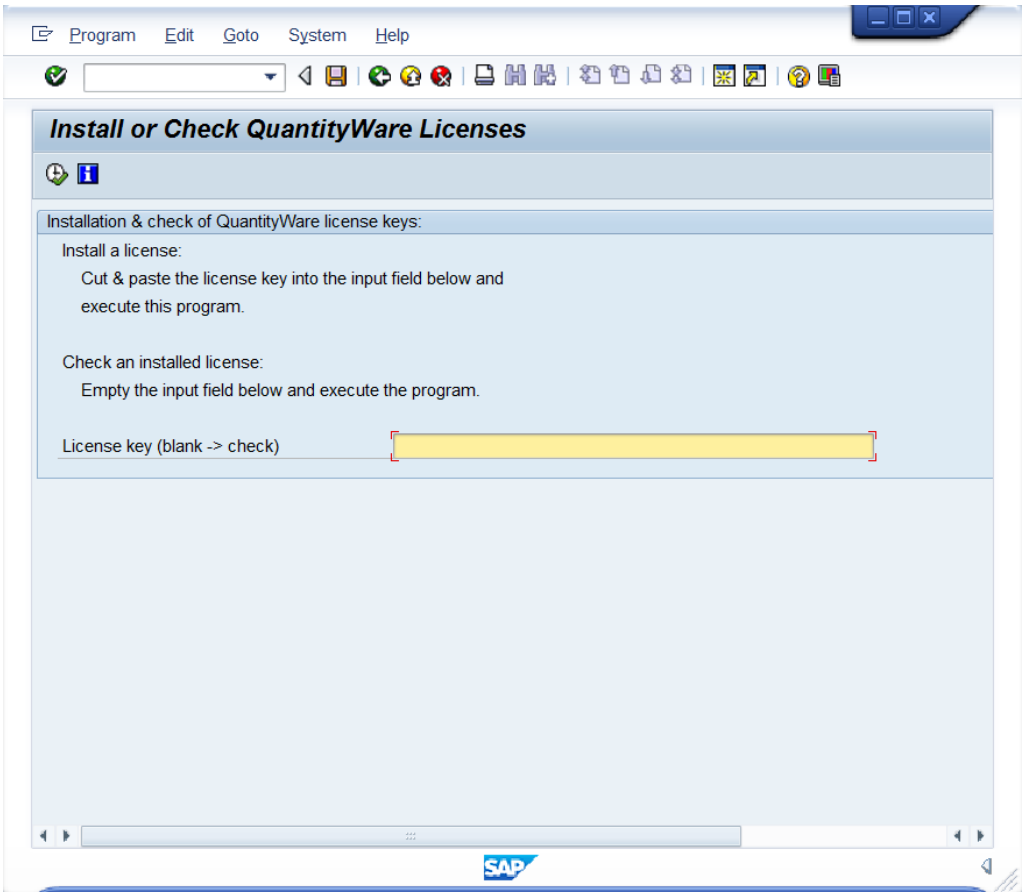
In this document we described the functional and usability enhancements that will be delivered with BCS CSP03.

Planned delivery of CSP03 for BCS 10B on ERP 6.0 is 30/09/2014.

Technical Enhancements

With BCS 10B CSP03, the BCS software usage key mechanism has been extended.

- It is now possible to issue a system and client specific BCS usage key (e.g. required to support hosting deployments).
- **All usage keys issued from 01.08.2014 (1st August 2014) are CSP03 compatible.**
- Customers who upgrade their BCS 10B installation to BCS 10B CSP03 and have received their keys before 01.08.2014 will require new usage keys.
  - The “replacement keys” must be requested via the QuantityWare Service portal (available September 2014).
  - All customers with valid SaaS or Maintenance agreements will receive “replacement keys” upon request, at no extra charge.
- **All keys must be reapplied after application of CSP03.**
- The usage key installation / check tool has not changed and is available via the Petroleum or Gas Measurement Cockpit Menu: Cockpit -> Usage Key:



Application and Usage Specific Features

BCP/CTP & BCG/CTG Functionality

The Petroleum Measurement Cockpit (PMC for BCP & CTP) and Gas Measurement Cockpit (GMC for BCG & CTG) are the single access point to BCP,CTP, BCG and CTG functionality for your petroleum and gas measurement experts. The following PMC and GMC enhancements are delivered with BCS CSP03:

Test Scenario Tool Enhancements

- Test Scenarios can be defined to run “green” if a defined error is raised during the calculation. This way, e.g. range checks can be tested to work properly in your production environment.
- All Test Scenario Tool Lists are available as ALV Lists.

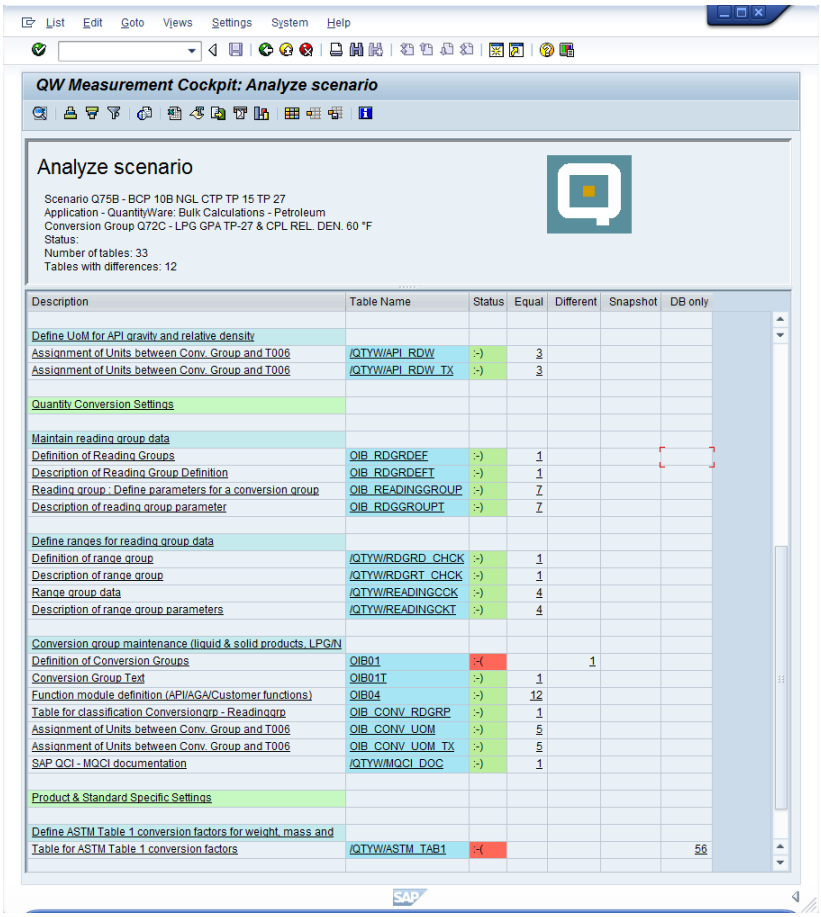
Maintenance and Archiving of Test Scenario Logs

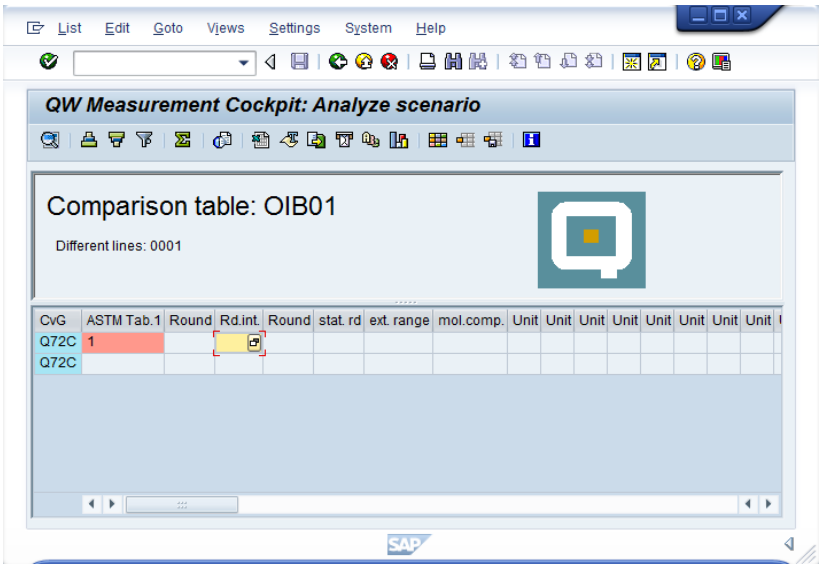
- Test Scenario Logs which report an error can be analyzed and maintained with a log status and a mandatory comment to support the error analysis.
- Logs which show no error or logs with log status “Confirmed” can be archived into a shadow database.

New Test Scenario Snapshot Tool

The new Snapshot Tool is utilized to store all relevant configuration data and the adjunct scenario definition data for a scenario which runs “green”. For each validated scenario running “green”, you may store exactly one snapshot into the snapshot database.

If this scenario reports an error at a later runtime, the snapshot analysis simply compares the scenario definition and the actual system configuration with the snapshot data. Quantity conversion issues which are detected by scenario test runs can thus be analyzed and resolved easily without the need to analyze any ABAP code:

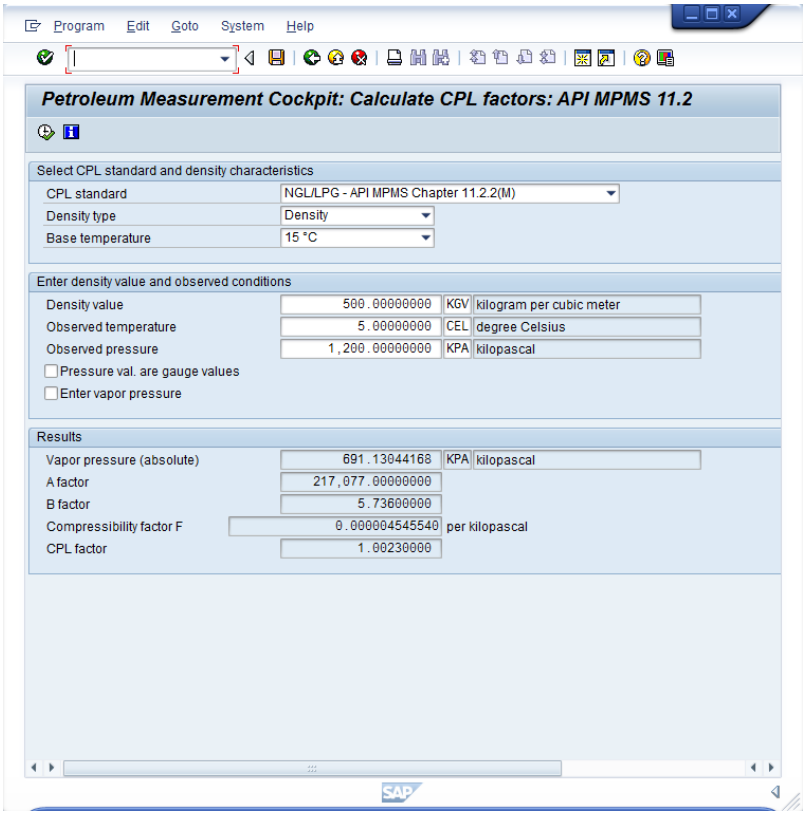

List Edit Goto Views Settings System Help
QW Measurement Cockpit: Analyze scenario
Analyze scenario
Scenario Q75B - BCP 10B NGL CTP TP 15 TP 27
Application - QuantityWare: Bulk Calculations - Petroleum
Conversion Group Q72C - LPG GPA TP-27 & CPL REL. DEN. 60 °F
Status:
Number of tables: 33
Tables with differences: 12
Description | Table Name | Status | Equal | Different | Snapshot | DB only
Define UoM for API gravity and relative density
Assignment of Units between Conv. Group and T006 | /QTYW/API_RDW | :-) | 3
Assignment of Units between Conv. Group and T006 | /QTYW/API_RDW_TX | :-) | 3
Quantity Conversion Settings
Maintain reading group data
Definition of Reading Groups | OIB_RDGRDEF | :-) | 1
Description of Reading Group Definition | OIB_RDGRDEFT | :-) | 1
Reading group : Define parameters for a conversion group | OIB_READINGGROUP | :-) | 7
Description of reading group parameter | OIB_RDGGROUPT | :-) | 7
Define ranges for reading group data
Definition of range group | /QTYW/RDGRD_CHCK | :-) | 1
Description of range group | /QTYW/RDGRT_CHCK | :-) | 1
Range group data | /QTYW/READINGCCK | :-) | 4
Description of range group parameters | /QTYW/READINGCKT | :-) | 4
Conversion group maintenance (liquid & solid products, LPG/N
Definition of Conversion Groups | OIB01 | :-(| | 1
Conversion Group Text | OIB01T | :-) | 1
Function module definition (API/AGA/Customer functions) | OIB04 | :-) | 12
Table for classification Conversionqrp - Readingqrp | OIB_CONV_RDGRP | :-) | 1
Assignment of Units between Conv. Group and T006 | OIB_CONV_UOM | :-) | 5
Assignment of Units between Conv. Group and T006 | OIB_CONV_UOM_TX | :-) | 5
SAP QCI - MQCI documentation | /QTYW/MQCI_DOC | :-) | 1
Product & Standard Specific Settings
Define ASTM Table 1 conversion factors for weight, mass and
Table for ASTM Table 1 conversion factors | /QTYW/ASTM_TAB1 | :-(| | | | 56


List Edit Goto Views Settings System Help
QW Measurement Cockpit: Analyze scenario
Comparison table: OIB01
Different lines: 0001
CvG | ASTM Tab.1 | Round | Rd.int. | Round | stat. rd | ext. range | mol.comp. | Unit | Unit | Unit | Unit | Unit | Unit | Unit | Unit
Q72C | 1
Q72C

Support of Dynamic CPL Calculations

Implementations of API MPMS Chapter 11.2.1(M), API MPMS Chapter 11.2.2(M) and GPA TP-15 are delivered with BCS CSP03, together with new template conversion groups for crude oil, products and LPG, which are configured to calculate combined CTL and CPL correction factors based on these standards. List printing of API MPMS Chapter 11.2.1(M) and API MPMS Chapter 11.2.2(M) compressibility factors is provided via the PMC “Print Standards Lists” tab strip.

A new CPL calculator is available, allowing CPL factors to be calculated online for control and audit purposes:



SAP QCI Support of ASTM D1250-52 Table 6

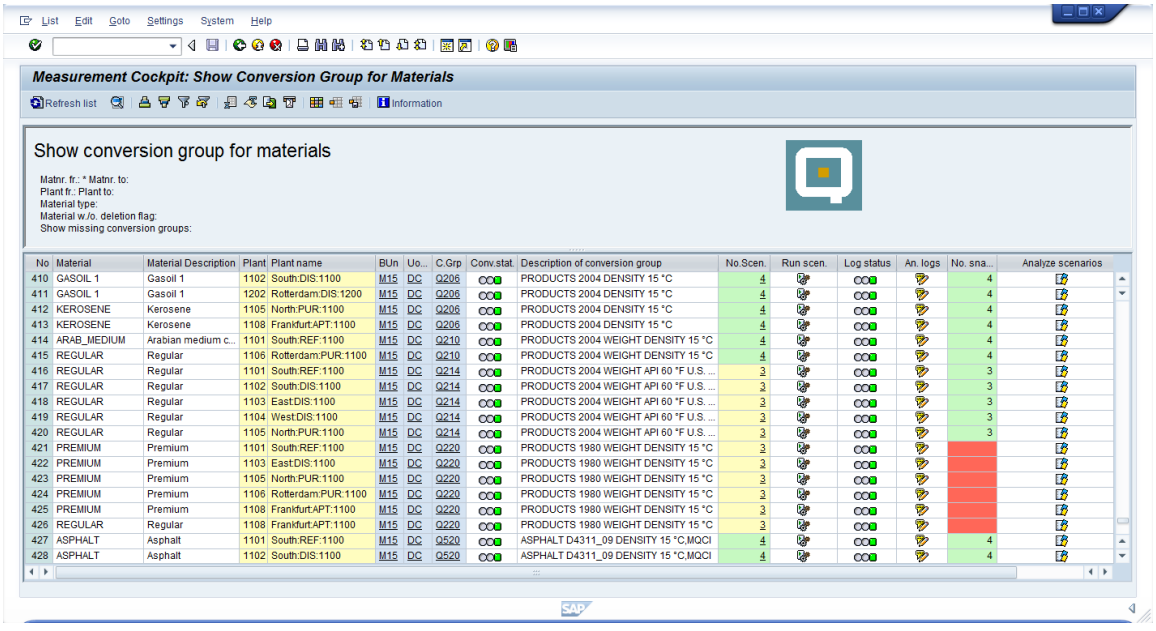
Usage of ASTM D1250-52 Table 6 implementation is made available via a new SAP QCI integration function. A new template conversion group Q0VA is delivered as an example.

Enhanced Conversion Group Selection

The conversion group selections “By product type” and “By measurement stds.” are extended, making the base temperature (with standard values 15 °C, 20 °C or 60 °F) available as an additional selection parameter.

Enhanced Material/Plant/Conversion Group Reporting

Via the central product assignment report, you can display - for your bulk oil & gas materials - the assignment of conversion groups to materials and plants. With CSP03, the QuantityWare test scenario snapshot tool is tightly integrated into this report. Once you have selected the conversion group assignments for a range of materials and plants, the conversion group status and the test scenario status is readily available to the Petroleum or Gas Measurement Specialist who is responsible for the correctness of production quantity conversions; navigation to all status details is available with one click, as well as navigation to display the material master and relevant material movement document (if the required authority is assigned to the user profile). The test scenarios snapshot analysis can be executed directly from this comprehensive overview list, thus a complete status for all quantity conversion calculations is readily available in production.



No	Material	Material Description	Plant	Plant name	BUn	Uo...	C.Grp	Conv.stat.	Description of conversion group	No.Scen.	Run scen.	Log status	An. logs	No. sna...	Analyze scenarios
410	GASOIL 1	Gasoil 1	1102	South:DIS:1100	M15	DC	Q206		PRODUCTS 2004 DENSITY 15 °C	4				4	
411	GASOIL 1	Gasoil 1	1202	Rotterdam:DIS:1200	M15	DC	Q206		PRODUCTS 2004 DENSITY 15 °C	4				4	
412	KEROSENE	Kerosene	1105	North:PUR:1100	M15	DC	Q206		PRODUCTS 2004 DENSITY 15 °C	4				4	
413	KEROSENE	Kerosene	1108	Frankfurt:APT:1100	M15	DC	Q206		PRODUCTS 2004 DENSITY 15 °C	4				4	
414	ARAB_MEDIUM	Arabian medium c...	1101	South:REF:1100	M15	DC	Q210		PRODUCTS 2004 WEIGHT DENSITY 15 °C	4				4	
415	REGULAR	Regular	1106	Rotterdam:PUR:1100	M15	DC	Q210		PRODUCTS 2004 WEIGHT DENSITY 15 °C	4				4	
416	REGULAR	Regular	1101	South:REF:1100	M15	DC	Q214		PRODUCTS 2004 WEIGHT API 60 °F U.S. ...	3				3	
417	REGULAR	Regular	1102	South:DIS:1100	M15	DC	Q214		PRODUCTS 2004 WEIGHT API 60 °F U.S. ...	3				3	
418	REGULAR	Regular	1103	East:DIS:1100	M15	DC	Q214		PRODUCTS 2004 WEIGHT API 60 °F U.S. ...	3				3	
419	REGULAR	Regular	1104	West:DIS:1100	M15	DC	Q214		PRODUCTS 2004 WEIGHT API 60 °F U.S. ...	3				3	
420	REGULAR	Regular	1105	North:PUR:1100	M15	DC	Q214		PRODUCTS 2004 WEIGHT API 60 °F U.S. ...	3				3	
421	PREMIUM	Premium	1101	South:REF:1100	M15	DC	Q220		PRODUCTS 1980 WEIGHT DENSITY 15 °C	3					
422	PREMIUM	Premium	1103	East:DIS:1100	M15	DC	Q220		PRODUCTS 1980 WEIGHT DENSITY 15 °C	3					
423	PREMIUM	Premium	1105	North:PUR:1100	M15	DC	Q220		PRODUCTS 1980 WEIGHT DENSITY 15 °C	3					
424	PREMIUM	Premium	1106	Rotterdam:PUR:1100	M15	DC	Q220		PRODUCTS 1980 WEIGHT DENSITY 15 °C	3					
425	PREMIUM	Premium	1108	Frankfurt:APT:1100	M15	DC	Q220		PRODUCTS 1980 WEIGHT DENSITY 15 °C	3					
426	REGULAR	Regular	1108	Frankfurt:APT:1100	M15	DC	Q220		PRODUCTS 1980 WEIGHT DENSITY 15 °C	3					
427	ASPHALT	Asphalt	1101	South:REF:1100	M15	DC	Q520		ASPHALT D4311_09 DENSITY 15 °C,MQCI	4				4	
428	ASPHALT	Asphalt	1102	South:DIS:1100	M15	DC	Q520		ASPHALT D4311_09 DENSITY 15 °C,MQCI	4				4	

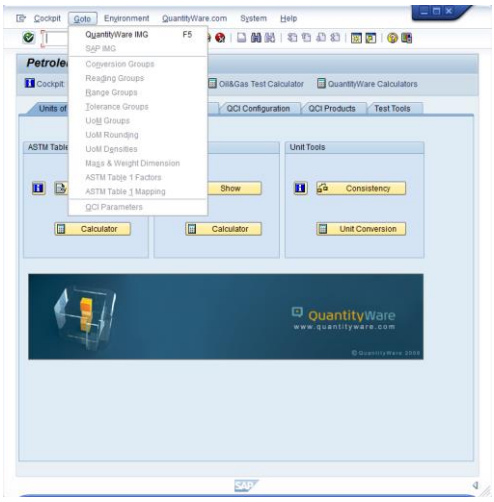
BCP/CTP & BCG/CTG Usability

Reflecting the constructive and important feedback from customers and consultants who work with the Petroleum and Gas Measurement Cockpit, the following PMC and GMC usability enhancements are delivered with BCS CSP03:

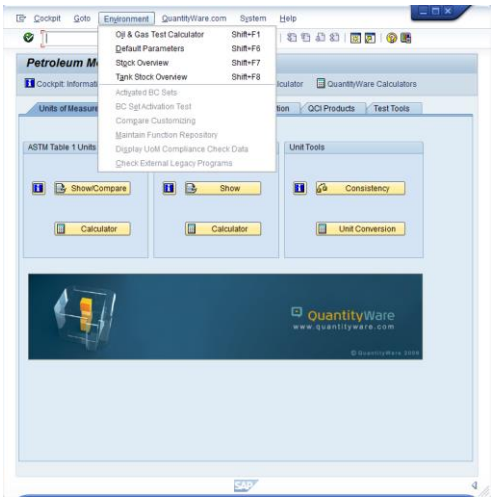
Enhanced Usability - Cockpits

Access to PMC and GMC functions, which are not relevant in e.g. production clients, can be turned off in such clients, simplifying the user experience:

No direct access to customizing



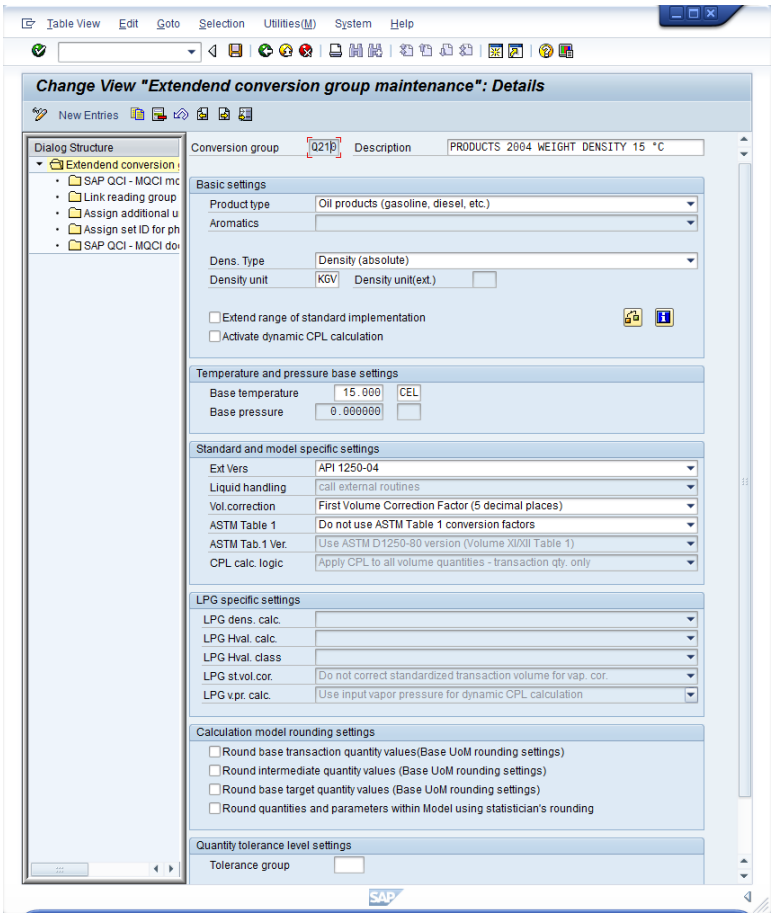
No access to technical tools



Enhanced Usability - Configuration

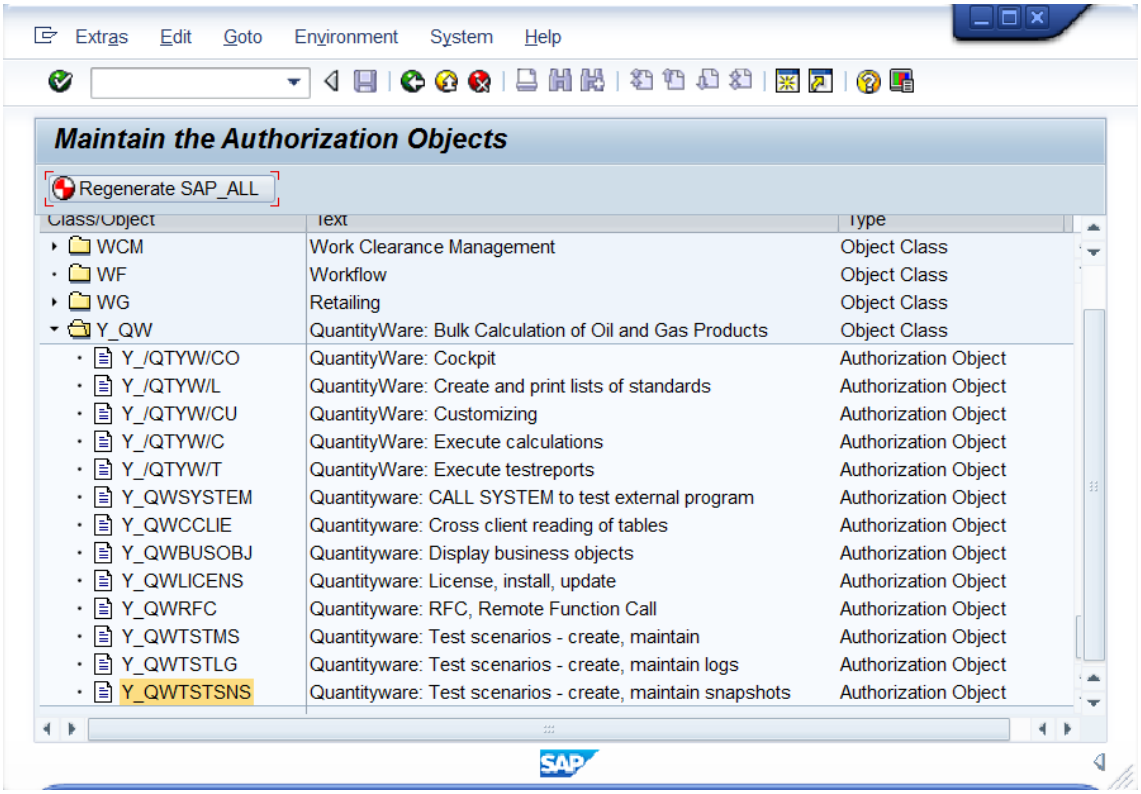
The conversion group configuration screen has been enhanced so that only settings which are relevant for a chosen product type and conversion group class (SAP QCI or MQCI) are available for input or change.

In change mode, you directly access the conversion group check tool and the technical documentation of the conversion group.



BCP/CTP & BCG/CTG Security

With BCS CSP03, new authority profiles and single roles for PMC and GMC access have been defined and implemented as part of the QuantityWare Virtual Forge Certification Project. BCS CSP03 contains new single roles and example composite roles, allowing customers to easily define their own composite roles.



The Petroleum & Gas Measurement Cockpit functions can now be securely assigned to dedicated users via the use of composite roles.

BCP and BCG Corrections

QuantityWare notes 000044, 45, 46, 48, 49, 50, 53 and 54 are contained in CSP03:

Note Number	Short Text	Link
000044	Function /QTYW/WEBCALC_CHAR_TO_FLTP short dump	http://www.quantityware.com/_data/note-000044.pdf
000045	Table 13M contains two incorrect values	http://www.quantityware.com/_data/note-000045.pdf
000046	C.N.P. No. 6 – 70 Table 2 support - Brazil	http://www.quantityware.com/_data/note-000046.pdf
000048	Second crude oil calculation model – net masses & weights	http://www.quantityware.com/_data/note-000048.pdf
000049	BCS 10B - CSP02 – minor corrections and enhancements	http://www.quantityware.com/_data/note-000049.pdf
000050	BCD_FIELD_OVERFLOW during BCS 10B installation	http://www.quantityware.com/_data/note-000050.pdf
000053	Advanced Development – API MPMS 11.5 new “Tables” 3, 21 and 51 – MQCI	http://www.quantityware.com/_data/note-000053.pdf
000054	ASTM D1250-52 Table 6 – VCF errors	http://www.quantityware.com/_data/note-000054.pdf

In addition to these corrections and advanced developments - already delivered as individual notes - the following corrections within the PMC and GMC are provided:

- The Transport collection Tool has been corrected and enhanced so that SAP QCI message configuration is also included into a transport for SAP QCI conversion groups and collection of all UoM of a UoM group is available via the central UoM list
- The ASTM D1555-09 (60 °F) List value for 5 °F for 350 – 400 aromatics was missing in the printed list and is now available (range corrected from 6 to 5 °F)
- The ASTM Table 1 – 2008 calculator logic “use reverse entries” did not work properly and has been corrected
- The GPA TP-27 list printing of VCF for customer specified base temperature showed incorrect VCF values and has now been corrected