

Note: 000037

Overview

Number	000037
Description	QuantityWare BC Set UoM Definitions
Version	3 from 06.07.2017
Status	Released to Customer
Language	EN
Responsible	Markus Seng
Product	BCS
Category	Consulting & Configuration

Symptom

- During your BCS implementation project, you follow the PAIG documentation. You are questioning a UoM (Unit of Measure) conversion factor, which is defined in SAP transaction CUNI
 - You are questioning the UoM conversion factor of SAP UoM GAL (GLL)
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Cause

UoM definitions and conversion factors are freely configurable. SAP delivers UoM settings and definitions in client 000. QuantityWare delivers UoM settings and definitions via BCS BC sets with partially overlapping keys.

Solution

You have activated the QuantityWare BC set - in exactly one dedicated template client (045) as recommended by QuantityWare - which contains more than 400 unit of measure(UoM) definitions. You are following the QuantityWare Project Assessment and Implementation Guidelines (PAIG) for BCP or BCG. You wish to check the correctness of the UoM conversion factors as required within the PAIG

documentation. The UoM Compliance Analysis Tool (available within the PMC and GMC) is utilized to determine compliance and traceability of your UoM settings and conversion factors.

QuantityWare has carefully maintained the UoM conversion factors - for all (more than 400) UoM definitions delivered with the BC sets - based on NIST Special Publication SP 811(2008):

[NIST - Guide for the Use of the International System of Units \(SI\)](#) .

The following UoM measurement standards are relevant for UoM definitions and conversion factors (which partially define different conversion factors for identical UoM):

- API MPMS Chapter 15: Guidelines for the Use of the International System of Units (SI) in the Petroleum and Allied Industries
- API MPMS Chapter 11.5: Annex D - ASTM D1250-08(13)e1 (also referenced in ISO 91:2017)
- Petroleum Measurement Tables Volume XI/XII - ASTM D1250-80: Table 1
- IEEE/ASTM SI 10TM: American National Standard for the Use of the International System of Units (SI): The Modern Metric System (2002)
- NIST Guide for the Use of the International System of Units (SI) - Special Publication 811 - 2008

In addition, due to legacy considerations with existing SAP Oil & Gas installations, where so-called “optimized” conversion factors have been maintained for the last three decades, QuantityWare delivers some BC set UoM “as defined” by SAP in SAP client 000:

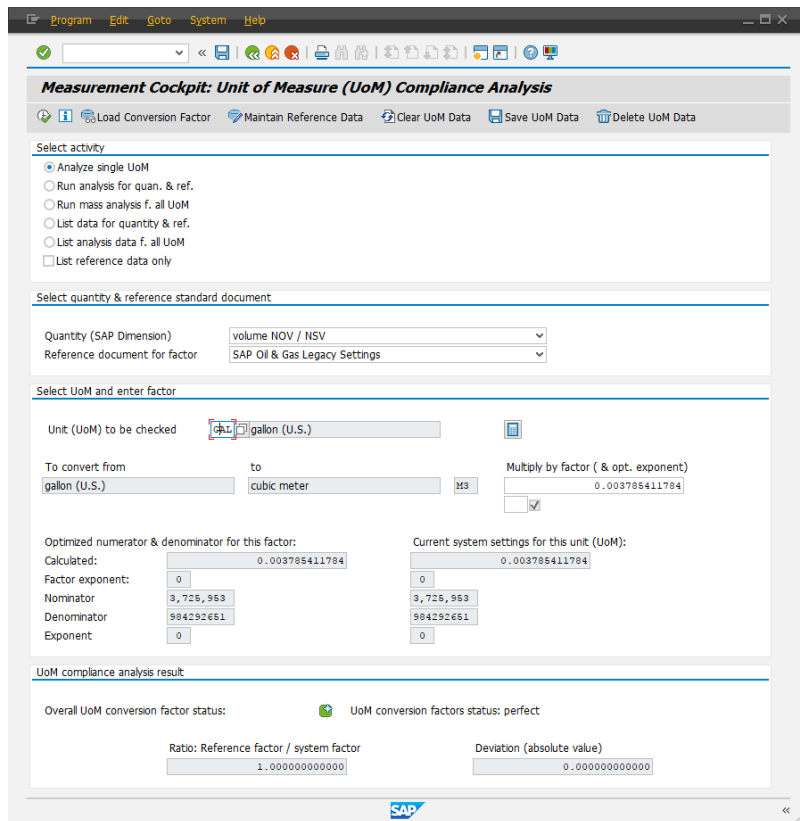
- SAP Oil & Gas Legacy Settings

For the legacy UoM GLL (commercial key GAL) - the U.S. gallon - the legacy conversion factor differs substantially from the NIST SP811 definition; QuantityWare thus recommends utilization of UoM UGL (commercial key UGL) instead. Within the QuantityWare BC set delivery, the UoM GLL conversion factor **has been corrected**. However, you may have copied UoM definitions from SAP client 000, where this factor is still differing.

If UoM GLL (commercial key GAL) still needs to be used, you have to correct the conversion factor of this unit (copy numerator and denominator as defined for UoM UGL in template client 045).

QuantityWare test scenarios and implementation tests do not utilize UoM GLL (commercial key GAL). In general, as advised within the PAIG documentation, you should carefully check the UoM conversion factors before distributing any UoM from client 045 into other clients.

Within your project, utilize the UoM Compliance Analysis Tool (Part of the PMC (Petroleum Measurement Cockpit) / GMC (Gas Measurement Cockpit)) to ensure that all your UoM definitions are compliant with a referenced UoM measurement standard. The UoM Compliance Analysis Tool has been delivered with BCS 10B CSP02.



Transport Reference

No SAP-based transport

Validity

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