QuantityWare

BCP 1.0A & BCG 10A

Measurement Cockpit - Customer Test Case Tool

22.11.2008

Notes:

Contents

BCP 1.0A & BCG 10A 1

MEASUREMENT COCKPIT - CUSTOMER TEST CASE TOOL 1

Notes: 2

Contents 3

Introduction 4

1. Installation 5

2. Access to the Customer Test Case Tool 6

3. The Customer Test Case Tool 8

3.1. Defining customer specific test cases 8

3.2. Running customer specific test cases 14

4. Summary 17

Introduction

An important aspect in the definition of complex quantity conversion calculations is to ensure that calculation results are reproducible, stable and based on (for example) contractual agreements between business partners, measurement standards or governmental requirements.
QuantityWare delivers a complete template for BCP 10A and BCG 10A that contains all customizing configuration allowing access to all standard implementations.
After installing either BCP 10A or BCG 10A in your system, test the implementation in client 045 (recommended client) where you have activated the relevant QuantityWare BC set. The test tools are accessible from the Petroleum or Gas Measurement Cockpit that is part of BCP 10A / BCG 10A.

After you have defined your relevant conversion groups based on copies from the QuantityWare template, as well as all conversion model settings (e.g. unit of measure rounding, input parameters, range checks etc.), you need to cross check the calculation results with an independent calculation procedure. Ultimately, this has to be a semi-manual process (typically using a spreadsheet and a pocket calculator, or results from a legacy system).
QuantityWare delivers a test tool which can be used to define test cases for your configuration settings (e.g. conversion group and related settings) in your system. This test tool can be accessed via the relevant Measurement Cockpit. This documentation describes how to use the test tool.
You can define up to 9999 test cases which you can run at any time in the system. Test cases can be transported, i.e. from your QA system, where test cases are typically defined, through to your production system. A log containing the test results can be written to the database after each test run.

Once you have created your own test cases, we recommend that you should run these tests and write the results to the log tables in the following cases:

- Before and after installing a new BCP or BCG Support Package or note
- Before and after installing an SAP Oil & Gas related note or package
- Before and after system Upgrade (or Enhancement Pack application)

In order to ensure measurement system stability and continuity.

1. Installation

The technical implementation is provided as a part of a QuantityWare support package.

Please follow the standard SAP instructions for importing service packages into your system via transaction SPAM.

SAP Oil & Gas must be installed

QuantityWare's BCP 10A or BCG 10A must be installed.

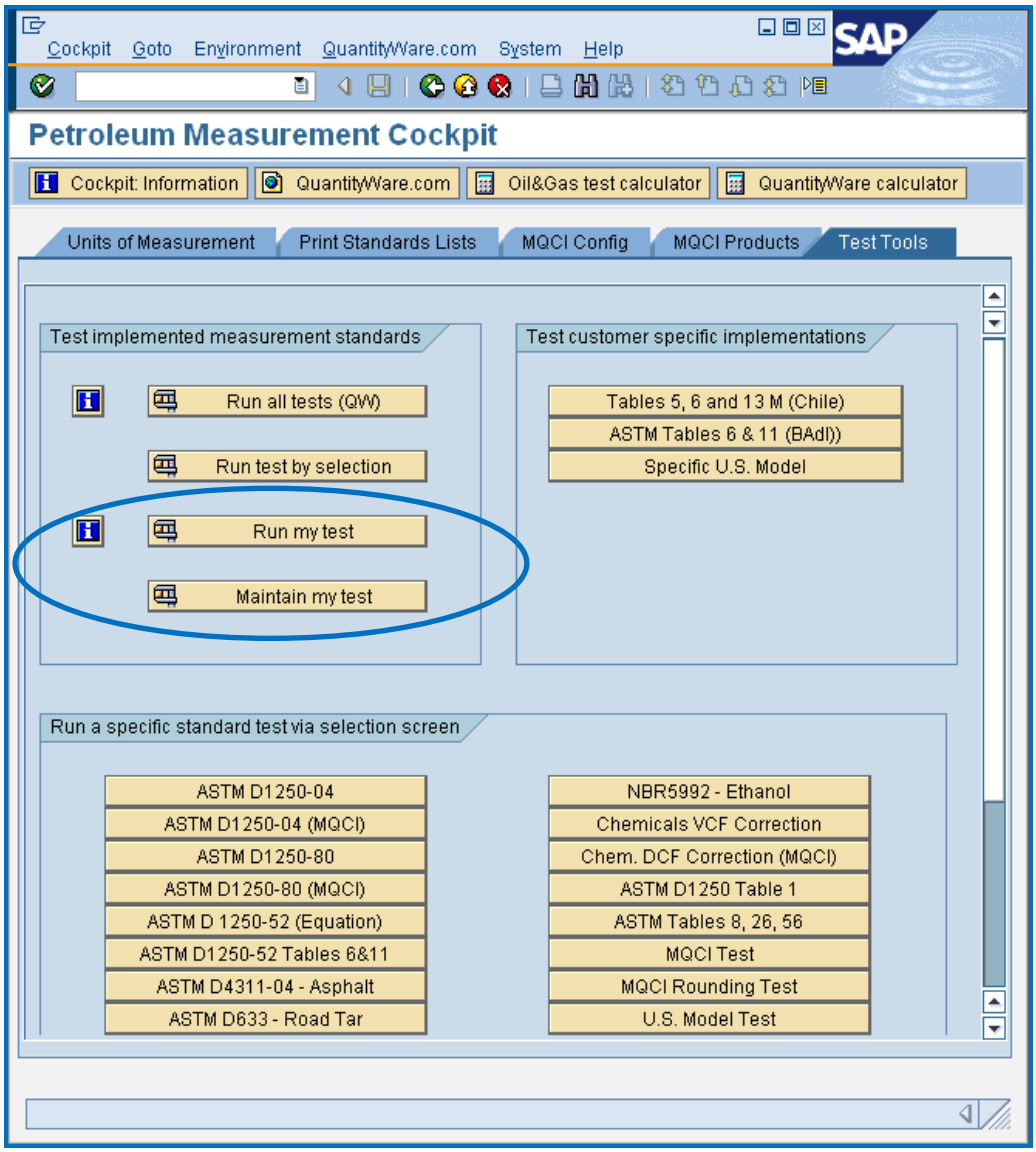
Customizing settings are included in this package, which are needed in every client in which this standard is used.
On ERP releases 4.72 and below, the related customizing transport (defined in Note000006) must be imported into all necessary clients, or distributed to them from client 000.
On releases ERP 2005 (ECC 6.00) or newer, BC Set /QTYW/BCP_10A or BC Set /QTYW/BCG_10A must be activated in the relevant clients.

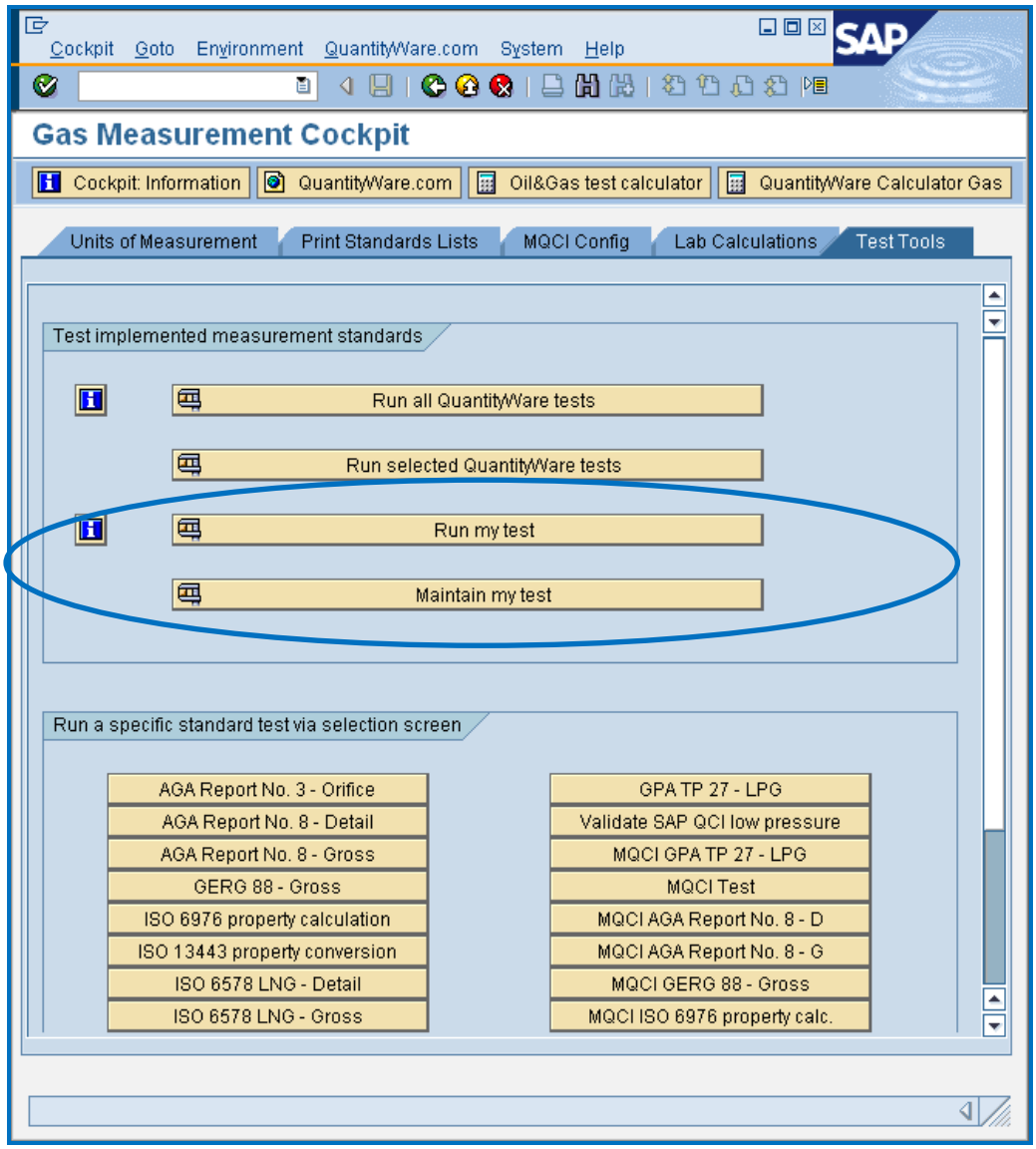
Please refer to the QuantityWare BCP & BCG 10A Installation Guide for more information.

> ⚠ *WARNING: If you import the customizing template into a pre-existing client, any pre-existing entries listed within the template (transport or BC-Set) will be OVERWRITTEN!*

2. Access to the Customer Test Case Tool

The Customer Test Case Tool can be accessed via the Petroleum Measurement Cockpit (Transaction /QTYW/COCKPIT) or the Gas Measurement Cockpit (Transaction /QTYW/COCKPIT_GAS):





As shown in the screen shots above, two push buttons are available. “Run my test” and “Maintain my test”.

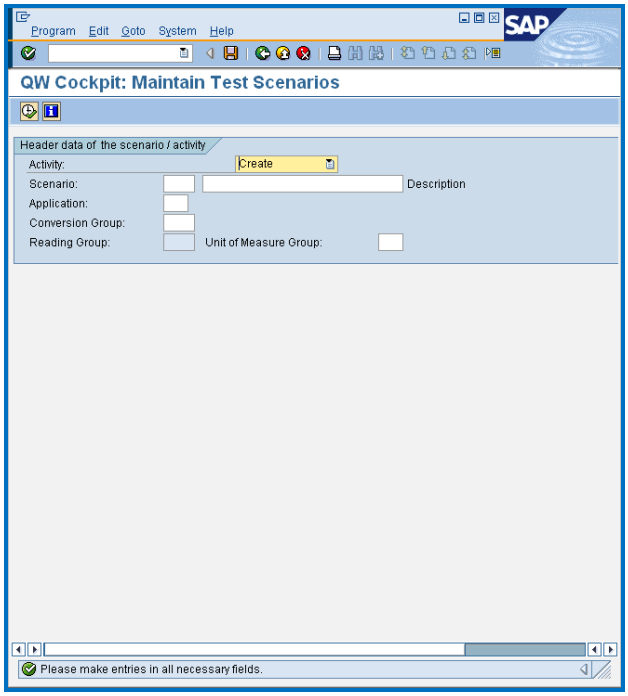
3. The Customer Test Case Tool

You can create up to 9999 test cases in your system. All test cases can be transported to any required system and client within your system landscape. Test case creation typically takes place in your quality assurance system.

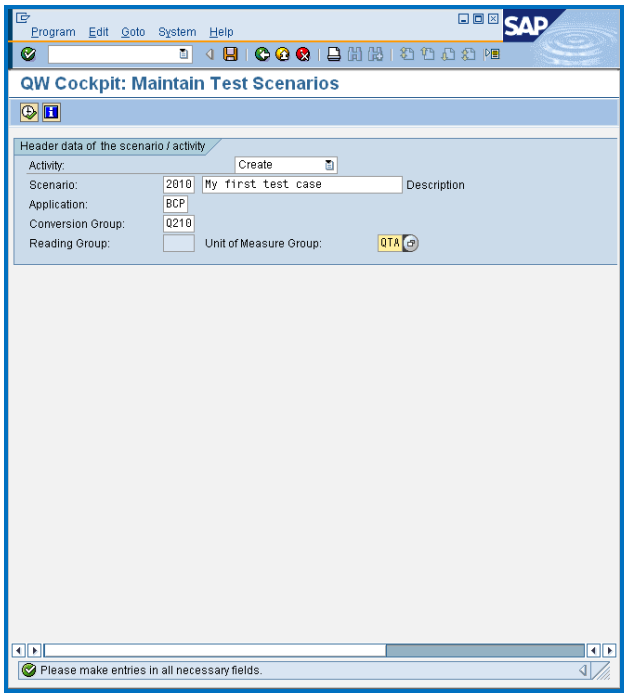
3.1. Defining customer specific test cases

If you select the “Maintain my tests” push button, the following options are available in the field “Activity”:

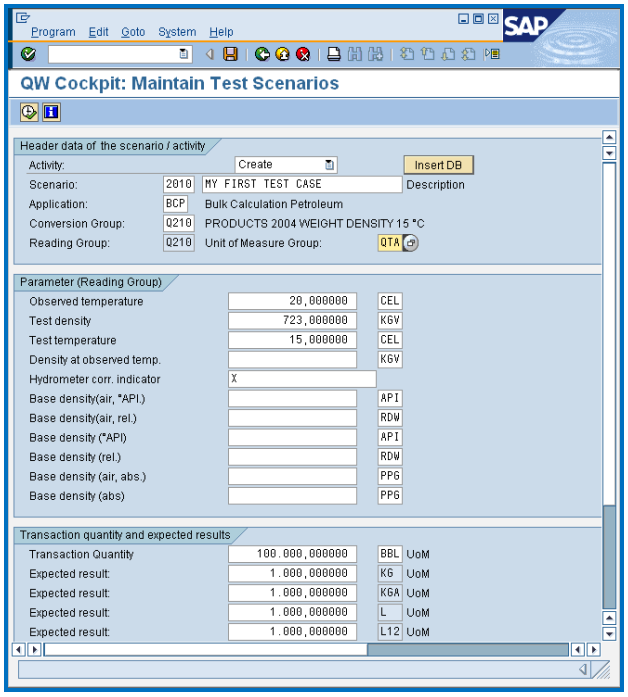
- Create:



Enter the Scenario ID (0001 to 9999), a description with the application (BCP or BCG) and the conversion group for the test case, as well as a unit of measure group that contains the UoM with which the quantity conversion will be executed:



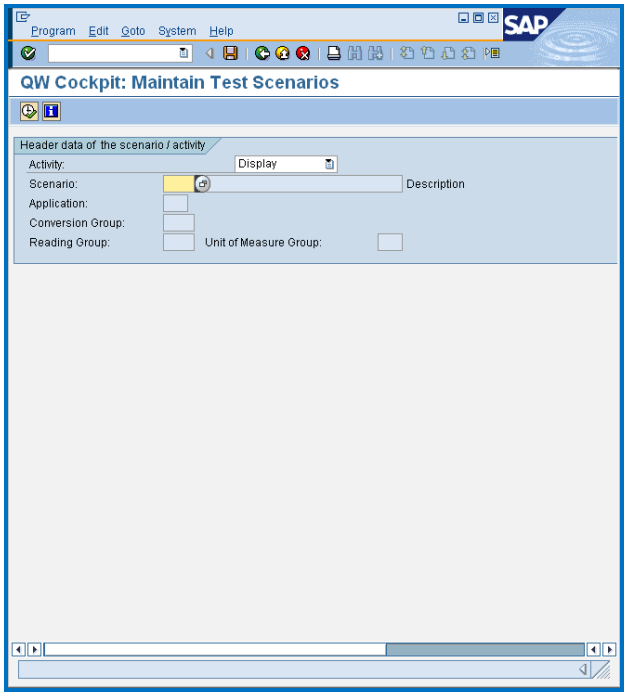
After you hit return, the system displays the relevant parameters from the reading group linked to the conversion group and suggests a transaction quantity and UoM (e.g. 100 000 BBL) as well as the target quantity results (e.g. 1 000 for each UoM of the conversion group):



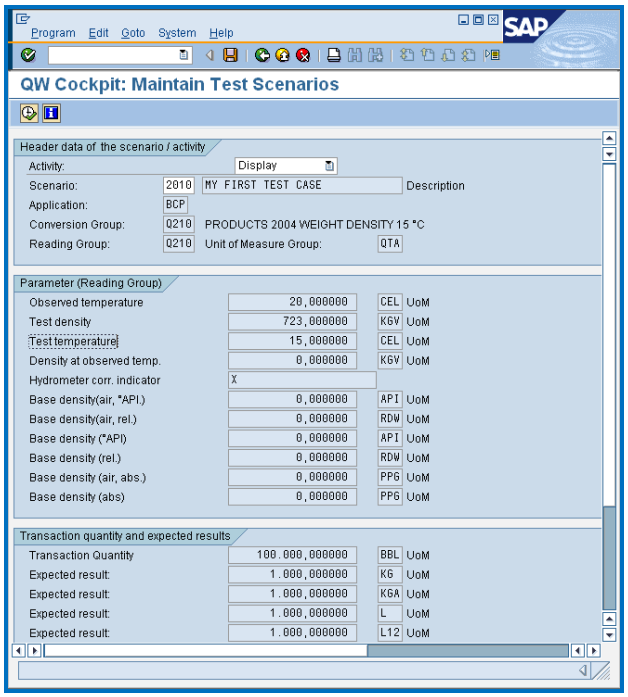
Now you can change the parameters and quantity results or save the test case directly by selecting the “Insert DB” push button.

Display

If you select the “Display” activity, you must enter your test case ID:

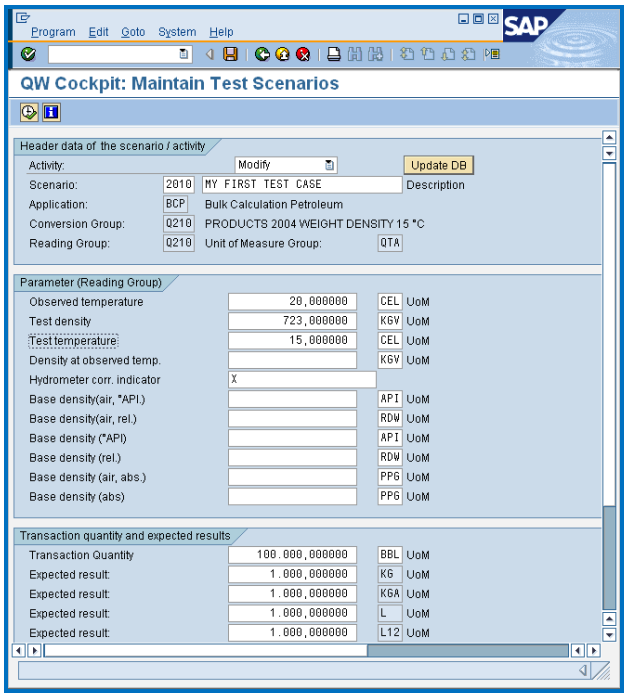


Then the scenario ID (or use the search help) :

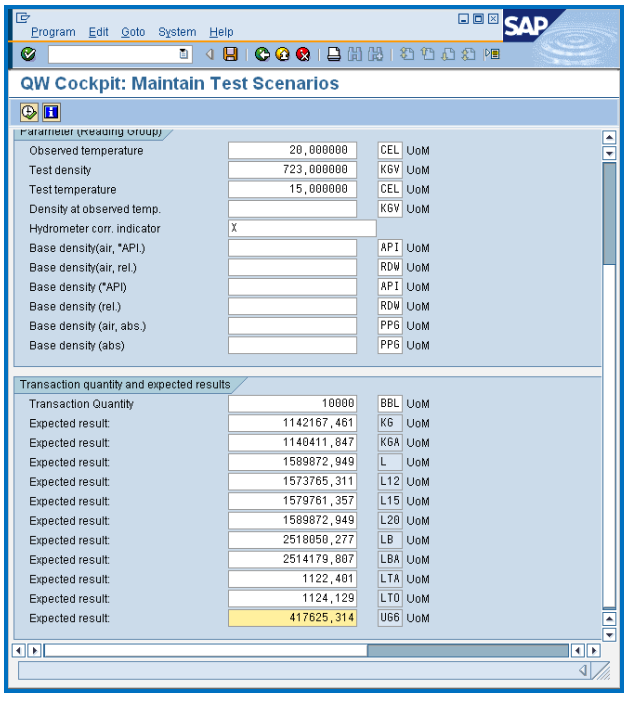


➔ Modify

Select your test case by entering your scenario ID and selecting the “Return” button:

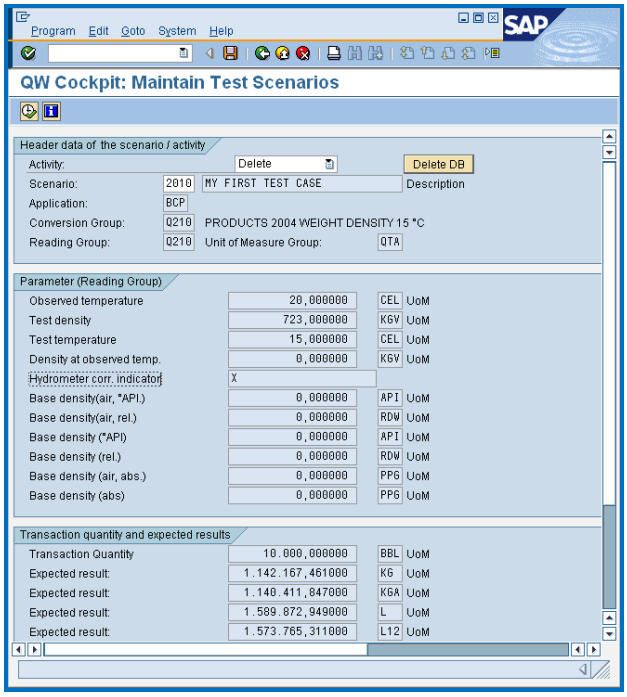


Enter the expected results for 10 000 BBL as well as the defaulted test density and observed temperature. Save your scenario using the “Update DB” push button:



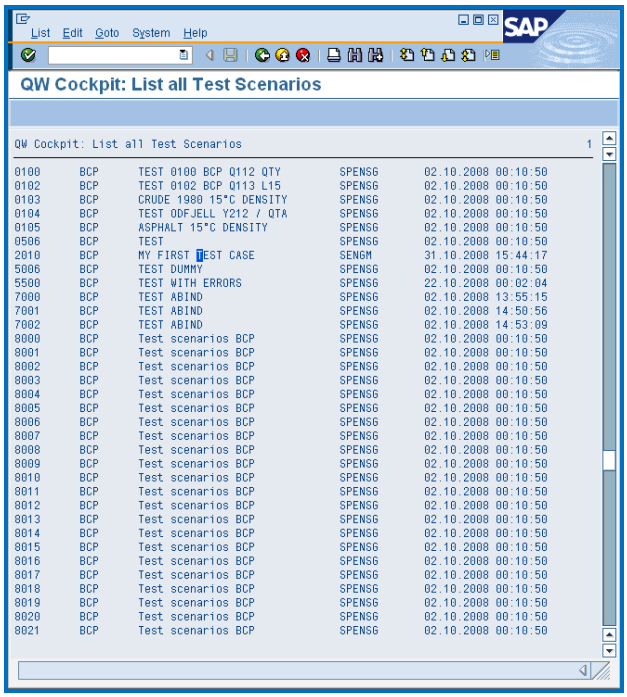
Delete

Scenarios which are no longer required as active test cases can be removed by using Activity “Delete”. Enter the scenario ID and select the push button “Delete DB”.



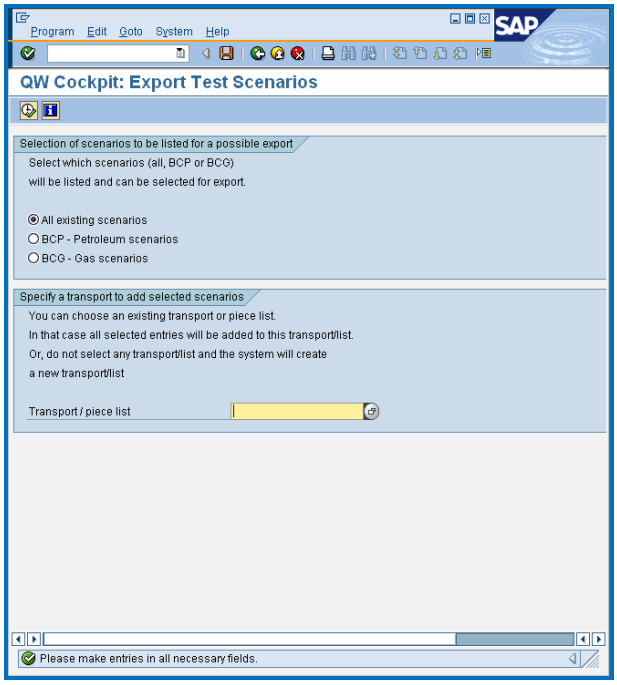
List all

You can list either all details, or just the header data of all existing test case scenarios:



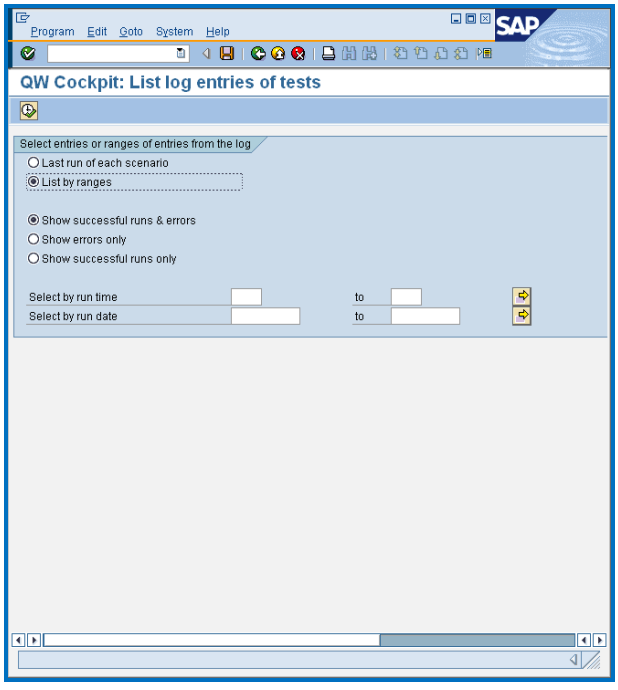
Export

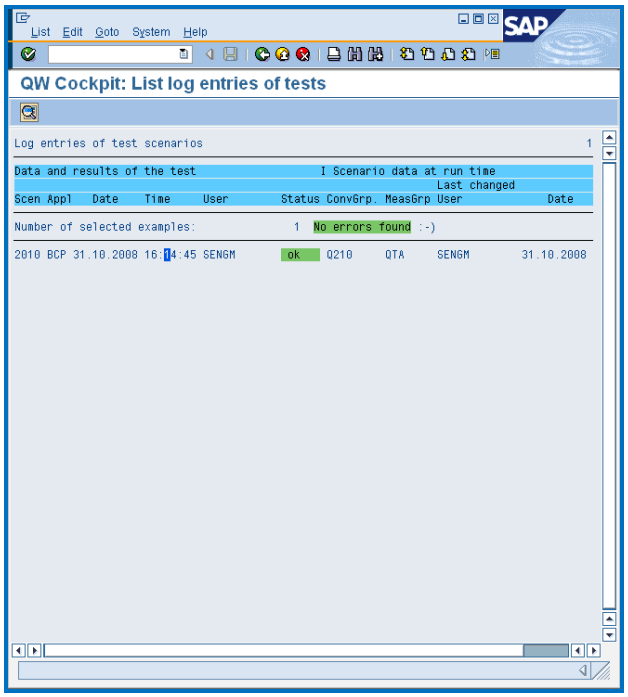
By selecting the activity “Export”, you can select test case scenarios for inclusion into a transport/piece list for transport into another client/system within your system landscape:



Display Log

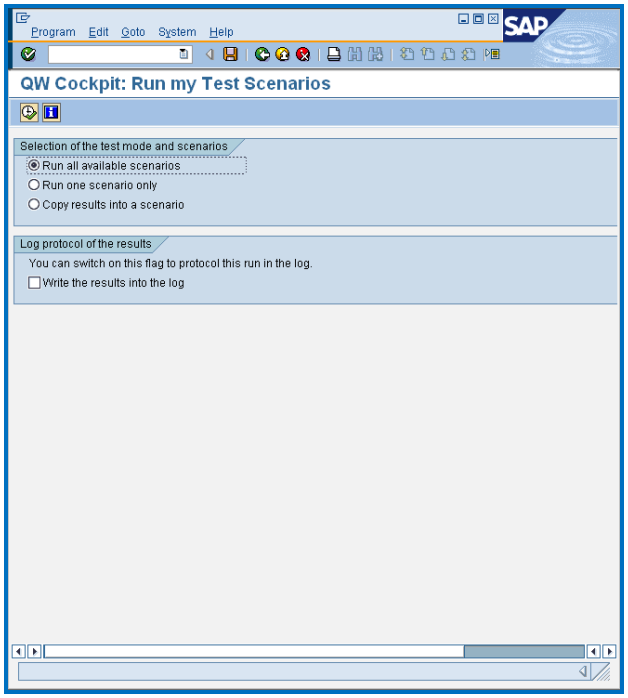
You can display the log entries for scenario runs whose results have been logged:



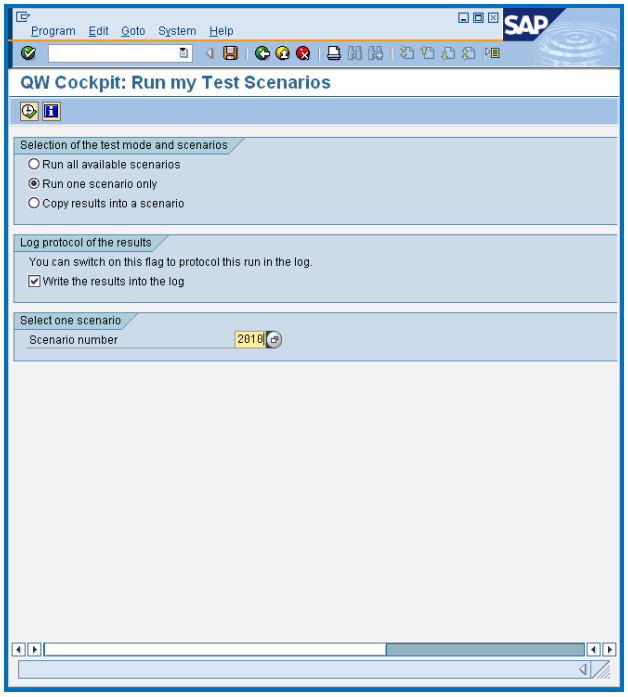


3.2. Running customer specific test cases

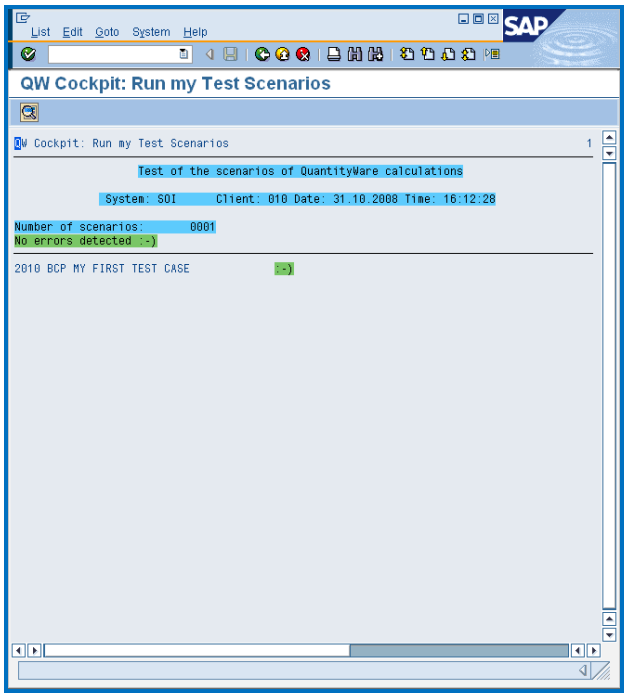
If you select the “Run my tests” push button, you have the options to run all test case scenarios, or one specific scenario:



In this example, the user has chosen to run scenario 2010 (see the pervious “Display Log” example) and has chosen to write a log entry:



After the test run, the result is displayed and the log is written in background to the database:



You can also choose to copy the system results into your scenario, if you have verified the correctness of these results manually, e.g. if using transaction O3QCITEST and your manually calculated results are identical.

> ⚠ *IMPORTANT: all such activities require a CAREFUL semi-manual procedure whereby you calculate your expected results independently from the system. Use at least a four eyes principle with archived sign-off to validate your results.*

4. Summary

The QuantityWare Customer Test Tool provides an easy-to-follow system-based test case management for all of your important test scenarios.
With these scenarios, you are now able to continuously monitor and check the correctness of your productive BCP or BCG implementations, thus providing maximum security and stability for all logistics processes, which rely on accurate and well defined quantity conversion data for bulk products. Additionally, usage of the Customer Test Tool can raise transparency and trust of your organisation as you are able to quickly prove at any point in time (and with virtually no effort) that the your bulk calculations are consistent and compliant to measurement rulings from regulatory bodies (e.g. business partners or governmental customs, excise and taxation authorities).