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□SAP QM Data even without SAP Interface?

As soon as a company has reached a certain enterprise size, the application of ERP systems to plan and control business activities and processes is often required. Many tasks in the field of business management are strengths of these systems; however, these systems do not focus on SPC and statistical evaluations. This article explains how Q-DAS software interacts with the SAP ERP system.

Q-DAS Web Portal

This article provides three examples. Many of our customers already apply one of these three SAP solutions but we deliberately forego naming the companies.

Assumption

A company records measurement and test data electronically in the running production process and transfers them to the SAP QM system. The SAP system allows for basic evaluations but is not able to make evaluations based on specifications of the automotive industry (guidelines). We offer some good and easy solutions if you want to perform a more detailed evaluation of these measurement and test data by using Q-DAS software.

These solutions are described in the following.

1. SAP-QM STI Interface

The first solution is to apply the SAP interface (SAP-QM STI). The approach is as follows.

You select the data, periods, production lots, materials, etc. they want to evaluate in SAP QM. Now you may transfer this "data package" to the Q-DAS software and start the evaluation. All you need is a standard interface for the transfer of data (QM-STI); however, the content of the information transferred always depends on the respective application (e.g. field mapping, combining lots, etc.). Thus, you always have to configure the interface.

Advantages of SAP STI

- + Interface integrated into SAP QM
- + Users make their selections in SAP QM
- + Q-DAS software evaluates selected data according to corporate specifications

Disadvantage of SAP STI

- Restricted flexibility in selecting data from SAP

2. Cyclical Database Export via SAP QM-STI

The disadvantage of applying the QM-STI interface is that the software only evaluates data selected in SAP QM. However, sometimes you need to compare different data, e.g. "How did a product change month by month?" or "How do batches, machines or operators affect the product?". If you want to make these evaluations and apply SAP STI, you will have to start a new selection in SAP QM respectively to answer each question – quite a time-consuming task. Additionally, the results are only available temporarily; in case you did not save them as a report in the Q-DAS software, they are quite volatile.

The solution to the problem is to transfer all data that might be statistically relevant to the Q-DAS



database. In this case, users are able to make individual selections and can always decide on which information they want to focus, e.g. show another month, hide a machine, etc.

You export data via SAP QM-STI interface but the user does not start the export. All relevant measurement and test information are transferred cyclically to a separate Q-DAS database. In most cases, this transfer is based on cyclical reports in the SAP QM system. This is the reason why all relevant data are available in the Q-DAS software. The Q-DAS programs provide users with detailed selection and evaluation options.

Advantages of the cyclical database export via QM-STI

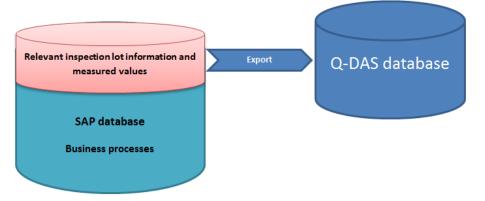
- + All data relevant to the evaluation are available in the Q-DAS database (high flexibility)
- + Application of the standardized SAP QM-STI interface

Disadvantages of the cyclical database export via QM-STI

- Redundant data since there are two databases containing an identical subset of the SAP database
- User does not start the evaluation in SAP QM (might but does not have to be a disadvantage)

3. Cyclical Database Export without SAP QM-STI

Similar to item 2, this solution involves a second database storing all relevant data. The export starts at regular intervals transferring any recently recorded data from the SAP QM database to the Q-DAS database. Q-DAS ASCII files provide the basis for the export since the Q-DAS software (Upload) controls how data are written in the Q-DAS database. The customer's IT department normally implements this type of export. You may even save the data directly to the Q-DAS database. The user responsible for statistical analysis may thus apply the SAP definitions (part descriptions, characteristics, specifications, etc.) and measured values available in SAP QM.



Advantages of the cyclical database export without QM-STI

- + All data relevant to the evaluation are available in the Q-DAS database (high flexibility)
- + SAP STI interface not required and thus no configuration thereof
- + Internal IT department is often able to implement and adjust the export (file export)

Disadvantages of the cyclical database export without QM-STI

- Redundant data since there are two databases containing an identical subset of the SAP database
- User does not start the evaluation in SAP QM (might but does not have to be a disadvantage)
- Data have to be exported and converted to the Q-DAS ASCII transfer format







The export and conversion of data to Q-DAS files is at the same time an advantage and a disadvantage. It all depends on the IT department's effort to export the data. If you are already experienced in exporting data, the implementation of the entire process may be quick and cost-efficient. However, if you have hardly any experience in the field of ASCII export, the required effort will be considerable.

None of these solutions is generally preferable to the others. It always depends on the demanded type of evaluation and the respective individual purpose of these evaluations. In case you want employees to work with SAP QM and they have to make evaluations only occasionally, e.g. for acceptance reports, the STI interface is the solution to choose. However, if you require analyses for process improvement including frequently changing selections and detailed search functions, the cyclical database export will be more suitable.

The Q-DAS team will be pleased to advise you on the perfect solution in your case.



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