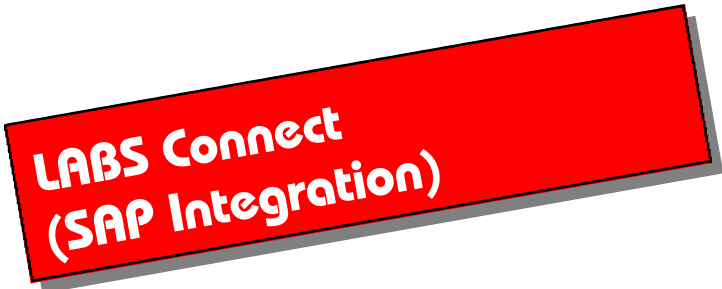


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### Integration of LABS/Q® in SAP® Environments

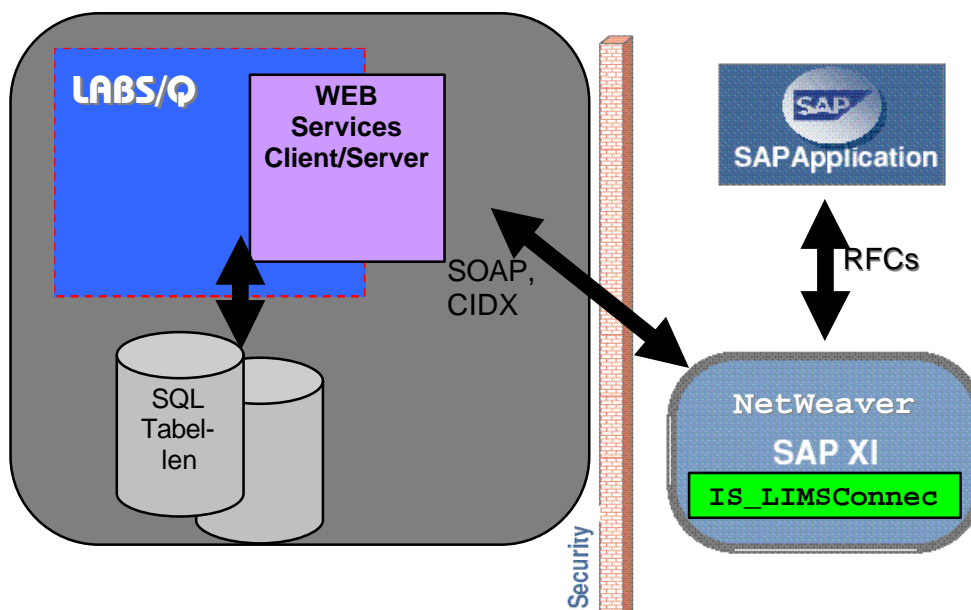
More than 90 percent of all LABS/Q® users apply products of the enterprise SAP®. In this context, it is a general requirement that third party applications should conform optimally to the SAP® environment. However, this means more than just a simple information exchange between the two systems. At least an adequate IT infrastructure must be available. Furthermore, it should be a basic aim to avoid parallel maintenance of master data in both systems and interference of work flows. Last but not least, the interfaces between the IT systems should allow an easy customizing with respect to individual user requirements and work flows without need of time-consuming programming.

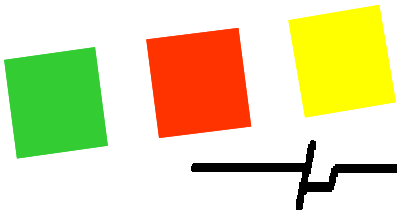
Already in 1997, iCD. GmbH designed a universal SAP® interface which works independently from the LABS/Q® application and which is based on SQL database (via Remote Function Calls, RFC). This interface yielded from our long standing experiences with external system connections like the SAP® system. Our interface received certification for QM IDI by SAP® R/3 (SAP® report no. 534, August, 28<sup>th</sup>, 1998) and is running successfully in many customer systems.

The novel NetWeaver® Exchange Infrastructure (XI) Integration Platform by SAP® offers a multitude of new possibilities for the link-up of third party applications. In addition to the common RFC interface it includes a variety of interesting functionalities which are already supported by the LABS/Q® system since 2006. This interface technology has received official certification for the LABS/Q® framework by SAP® („Powered by NetWeaver“) in February 2006. The following basic functional range is available for the interface:

#### Integration of the SAP® R/3 QM-IDI Function Calls:

The RFC function calls are linked with the LABS/Q® application via new adapters in NetWeaver XI by means of WEB services. This means, the full functional range of the former iCD. RFC interface is now completely replaced by the new NetWeaver IX technique. Thus, LABS/Q® can now connect to SAP® QM via hardware and platform independent WEB services.





Of course, even additional function calls, IDocs or Services of the SAP® application can be applied in a very flexible manner.

Below, we mention some basic possibilities for applying the universal interface in the context of **LABS/Q®** and the SAP® QM IDI interface:

### Complete Control by SAP® QM

In this mode, **LABS/Q®** acts as sub system to SAP® QM. Its task is to transfer information of the SAP® inspection lot to the connected instruments, to collect manually or automatically received measured values from the instrument, to perform calculations if necessary, to validate the detected results with respect to methodical limits and finally to transfer the result values directly to the SAP® QM system. The automatic **LABS/Q®** connection does only require master data for the testing method, for the inspection properties and for the control types. All other information is purported by SAP®.

### SAP® QM as leading System

Master data like for example materials, customer/suppliers, properties and specifications are provided by SAP® and can be added to the **LABS/Q®** sub system. Based on this master data, submissions can be generated and processed directly in **LABS/Q®** independent from SAP® QM. If SAP® notifies an inspection lot, an automatic synchronization will take place. After release of the inspection in **LABS/Q®** results and the usage decision can be transferred to SAP® QM. In principle, even additional inspections like in-process-control, stability studies or environment protection and development studies can be managed in **LABS/Q®**.

### LABS/Q® as leading System

**LABS/Q®** just takes over general master data information (material, customers, suppliers etc.) from SAP® and updates it, if needed. All information, necessary for the inspections, is maintained in **LABS/Q®**. Transfer of this data to SAP® is possible, if required (special functionality). In this case, the SAP® inspection lot just acts as a notification whereas the information relevant to inspection is completely taken from the **LABS/Q®** master data content. After release, a usage decision can be transferred back to SAP®.

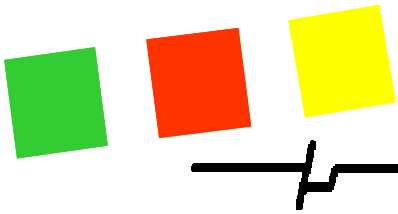
### Integrating LABS/Q® in the SAP® Portal

Via the SAP® portal, third-party applications like **LABS/Q®** may be integrated into the user interface of SAP®. Here, the WEB functionality of **LABS/Q®** offers a very easy way to manage this integration. Thus, parts of the **LABS/Q®** application or even the whole **LABS/Q®** system can be applied within the SAP® environment.

Examples:

The image displays three screenshots of the LABS/Q software interface. The top-left screenshot shows a table of 'Lieferspezifikationen' (Delivery Specifications) with columns for 'Material', 'Bezeichnung', 'Prüfungsmethode', 'Bezeichnung', 'Einheit', and 'Anzahl'. The top-right screenshot shows a 'Spezifikation' (Specification) screen for 'Celanese' with a table of 'Methoden' (Methods) and 'Bezeichnungen' (Designations). The bottom-left screenshot shows an 'Ergebnisse' (Results) screen with a table of 'Material', 'Bezeichnung', 'Prüfungsmethode', 'Bezeichnung', and 'Ergebnis'.

Material	Bezeichnung	Prüfungsmethode	Bezeichnung	Ergebnis
0400001	Ascorbin	0400001	visuelle Beurteilung	klar
0400002	Cholein	0400002	visuelle Beurteilung	klar
0400003	Kalium	0400003	Kaliumbestimmung	1.1 mg/glg
0400004	Magnesium	0400004	Magnesiumbestimmung	35.8 mg/glg
0400005	Kalzium	0400005	Kalziumbestimmung	123 mg/glg
0400006	Bilamin	0400006	Kalziumbestimmung	21 mg/glg
0400007	Chlorid	0400007	Arsenbestimmung	45.8 mg/glg
0400008	Carbonat	0400008	Arsenbestimmung	163 mg/glg
0400009	Sulfid	0400009	Arsenbestimmung	111 mg/glg



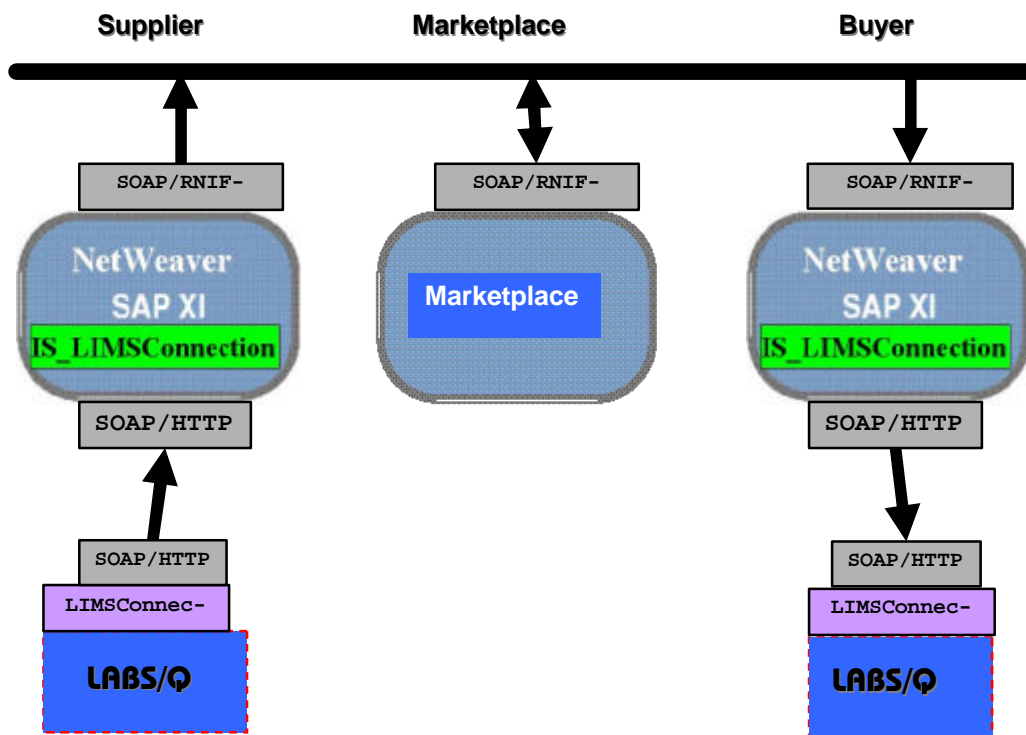
### Information Exchange via Industry Standards

SAP® pledged itself to support more industry standards and the enterprise already implemented first steps by offering NetWeaver.

Based on this functionality it is possible to integrate **LABS/Q**®, which is already implemented for the exchange of "certificates of analysis" on basis of CIDX (Chemical Industry Data Exchange).

Example:

### CIDX "Certificate of Analysis (COA)"



A concluded agreement between SAP® and iCD. GmbH (SAP® Developer Packages DPA), grants access to all relevant SAP® reference systems to the iCD. company. Based on these reference systems, iCD. continuously checks and improves the interface with respect to latest requirements.