

# **Toxicological Information- und Data Network - A European Challenge?**

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### **Introduction**

The main goal of the project was to create a universal tool for importing and browsing different information for all poison information centres in Germany.

The current version of the software can import product and address data. It is possible to view this data with an internal html-browser. The concepts of the implementation is open for extensions like medications or poisonous animals.

The presently implemented import-sources are:

- product data from EMIL
- address data from BgVV
- address data from CCG

At the moment the software is tested extensively.

### **Technique: JAVA on Oracle**

JAVA (1.3) is a universal programming language that allows up-to-date implementation techniques (keyword: object-oriented).

Oracle (8i) is a historical decision that was made in TOXINFO 2. Oracle is an efficient database management system.

### **Data Access**

A very complex data model was defined in TOXINFO 2. This model is the foundation of the data access in the software. The access is executed via JDBC. The main concept is independent from the database; nevertheless we decided to support only the Oracle-DBMS in order to simplify the maintenance.

### **Importer**

Based on the description of ROSETTA (1.3) the relevant workgroup with Martin Ganzert determined a set of rules that controls the import of documents. This “method of registration” was implemented and realized completely. The terminology was adopted to guarantee the extensibility of the source code.

Main aspects:

- No change of the original data: interpretations (e.g. toxicological estimations) should be done by the poison consultant, not by the software!
- The authentication of the author must be guaranteed and comprehensible.

### **Front end**

A team of programmers and specialists from the poison information centres created a front end template for the consultant. The display of product information can be customized by cascading style sheets (CSS).

## **Exchange**

The exchange of data between poison information centres is realized by encrypted e-mail. This method is certified by the German BSI (federal office for security in information processing).

## **Planning**

- Stage of practice: Import and exchange of “real” information from the industry
- XML: Extension of the exchange-format
- Automatic exchange via FTP-server
- Inclusion of the three remaining poison information centres

## **Hard-/Software Preliminaries**

- I386 from 500MHz, 256MB memory, 5GB harddisk
- Windows 2000/XP
- Oracle (from 8.1.5)
- Internet connection