



**RUN Software-Werkstatt GmbH** ([www.run-software.com](http://www.run-software.com))

### ***Foundation***

RUN Software was founded in 1994 to build a frame for the ODABA development that had been started 1992. The basic idea of the company is to combine modern technologies and tools with the development of powerful applications.

### ***Activities***

RUN Software work on three kinds of activities:

- Development of complex customer projects
- Development of basic software solutions
- Research

An essential part of RUN Software activities is research work. RUN Software has published several works about object-oriented database theory [1] [2]. Moreover, RUN Software has developed the method of Terminology Model [3], which is a good method of problem analysis. The Terminology Model has been used with success in two international statistical work groups (Neuchâtel group I and II from 2000 to 2006), which developed a knowledge model for international statistical offices [4] [5].

Current research work is directed to support active data [6] link and content driven applications. Another topic is the WEB database [7], which provide technologies of distributed database access via internet and storage independent database access [8]

Basically, RUN Software is developing object-oriented database software and tools. Besides, RUN Software provides complex applications mainly for different types of administration tasks. RUN Software has special experiences in developing applications with complex structure (e.g. metadata systems or complex administration systems).

Most RUN Software solutions are platform independent. This is also true for the tools provided by the company.

### ***Development of basic software solutions***

An essential part of the activities is the development of an object oriented database management system ODABA and related tools. ODABA is a fast development system, which allows reducing the development costs up to 90%.

Even though the ODABA storage format is efficient and save, customers prefer more widely accepted database formats. Therefore, RUN Software is working on a storage independent solution, which makes ODABA advantages available for different storage types as SQL or XML databases [2].

Most of ODABA tools are provided as open source software, which is free of charge, as long as being used for non-commercial purposes. Commercial use requires ODABA development licenses.

RUN Software's basic software solutions are platform independent and may run on different Windows platforms as well as under Linux or SUN Solaris.

### ***Projects***

RUN Software solutions are based on a high technological standard. Thus, RUN Software is able to provide solutions for complex problems with a minimum of resources. The following examples refer to RUN Software typical developments.

Since 1994 RUN Software has been invoked in developing a complex counting system for Mitropa, which includes contract management and controlling of money flows as well as an interface to SAP. An important step was the development of the Bridge system within a research program of EuroStat from 1997 to 1999. The integrated metadata system Bridge is now being used in central statistical offices of several European countries.

For transparent GmbH & Co. KG RUN Software has developed a WEB database application, which supports users working at any place in the world by accessing application data located on a WEB server. Even though large data amount needs to be accessed, applications are still fast. The system supports also automatic data import from several WEB sites, document management and problem-oriented email management.

### ***Research work***

RUN Software has been working actively in different research projects and international working groups. Several projects concerning statistical metadata have been supported by RUN Software as the EuroStat projects DOSIS (Integrated Metadata Management Systems), METANET and METAWARE [9]. Both Neuchâtel groups for defining statistical knowledge structures have been attended by RUN Software as well.

Several publications are available concerning database theory and terminology. We cooperate with the ISO standard committees for terminology and metadata registries. Several articles have been published at scientific conferences.

## **Publications**

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