

**Project Note**

# Better quality with Java EE application architecture

**Raiffeisen wished to standardise its application architectures to achieve an ambitious goal: better quality at a lower cost. With the help of Zühlke, it achieved that goal on its first attempt.**

**Task**

A Swiss bank wanted to standardise its development process for Java EE based systems. In particular, it wished to improve project planning and product quality while reducing operating expenses. The plans called for standardised target architectures, development tools and operating components to match.

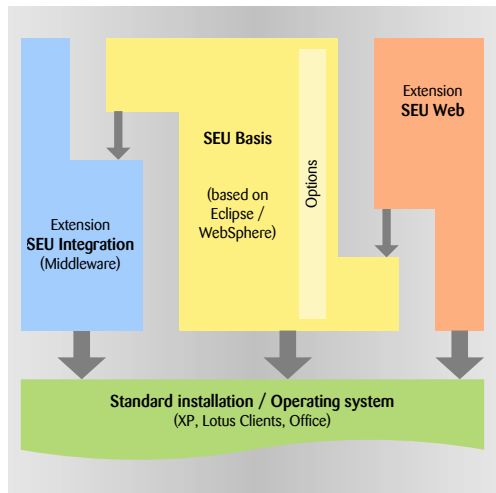
**Implementation**

Together with the customer, Zühlke analysed the application landscape and the IT infrastructure. Using the findings of this analysis, the technical multi-tier reference architecture was developed. The engineers then selected appropriate development tools and operating components, checking aspects of their suitability in POCs and with experimental prototypes.

The reference architecture provided for five possible types of architecture, three of which were strategically relevant. One type of architecture was designed for maximum possible interoperability with .NET applications and contained, inter alia, SOAP/WSDL-based Web services.

The development environment consisted of about 50 development tools and operating components, all open source products where possible and reliable. The formation of three packets (base, integration and Web) facilitated the distribution and optimisation of the licence costs.

The system engineering process was also adapted to depict the new aspects such as the standardised architectures and the development environment and to provide optimum support for software development. Concurrently, Zühlke engineers drew up suggestions on the structure of the development team, options for continuing training, and training paths. Two pilot projects demonstrated the effectiveness of the optimisation.



**RAIFFEISEN**



**Technical Data**

- Java EE
- Thin- and Rich-Clients
- EJBs and Web Services (SOAP/WSDL)
- Eclipse/Rational Application Developer
- WebSphere Application Server
- Hibernate
- XML Spy/Castor
- Clover
- Log4j

**Customer benefits**

- Drawing on its experience from a number of projects, Zühlke reliably defined optimum target architectures und development environments suitably adapted to match these architectures.
- With its advice and active support, Zühlke ensured an optimum transfer of expertise while the technology platform and architecture were being defined. Afterwards, the customer's team were able to keep optimising the systems autonomously.

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